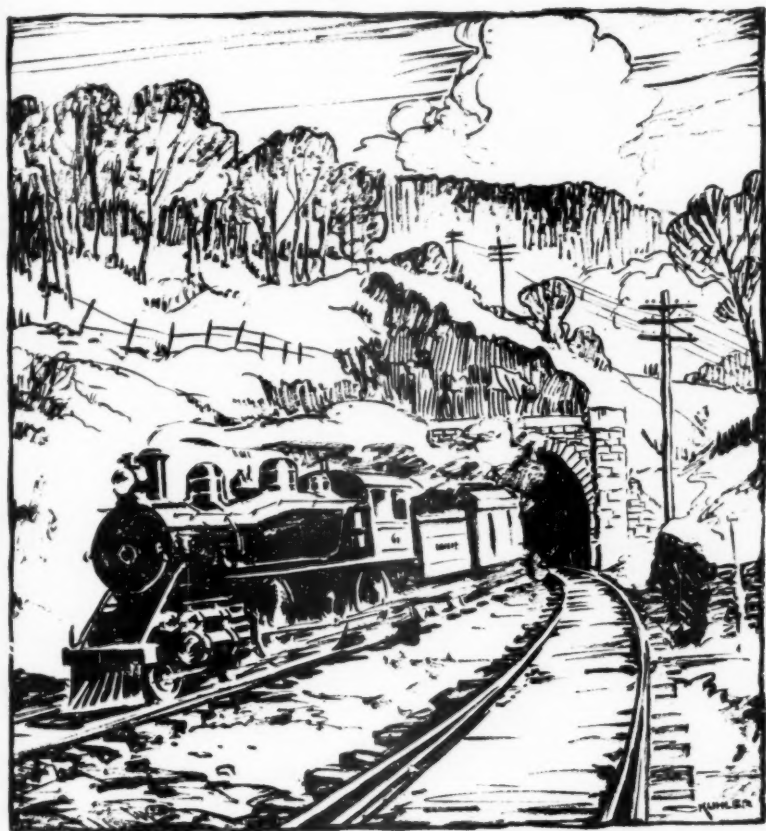


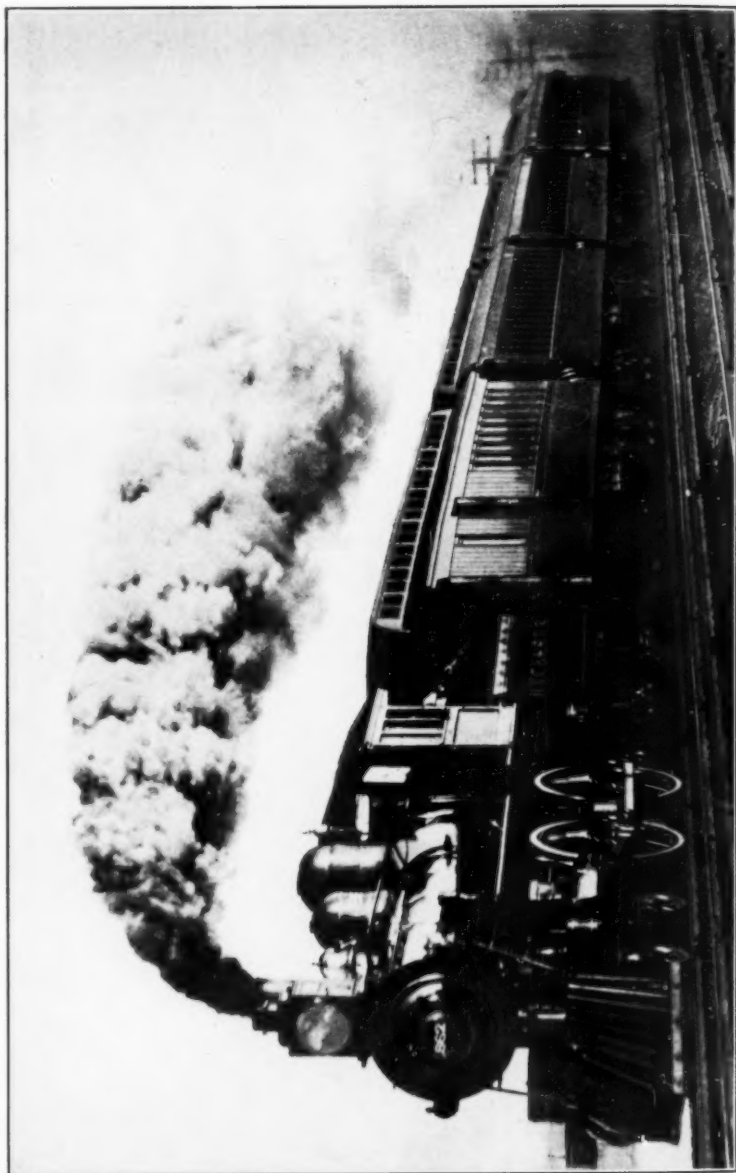
BULLETIN

No. 37

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THE RAILWAY AND LOCOMOTIVE HISTORICAL SOCIETY



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BULLETIN No. 37

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Table of Contents

Cover Design	6
Photographs for Sale	6
Joint Meeting	6
The Catskill Mountain Lines	7
The Pennoyer Colored Prints	14
Sandy River & Rangeley Lakes R. R. System	15
William Buchanan	33
Locomotives of the Boston & Maine Railroad	41
Correction	56
Yesterdays on the New York, Susquehanna & Western	57
Early Railroad Items	59
Brief Sojourns	62
Notes on Early Railroads	64
From Atlantic to Pacific	66
Worth Reading	67
Herbert Fisher	69
The "West Point" of the South Carolina Railroad	71

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A short time ago the attention of your Editor was directed to a statement made by Mr. M. N. Forney, to the effect that William Buchanan could get more out of a ton of coal in his engines than any other man in the business. While this statement is rather sweeping, an authority such as Mr. Forney would not have made it unless it were true. Many of our members doubtless recall the passenger engines of the late William Buchanan in the height of their glory when they went out on the "head end" of the best passenger trains of the New York Central & Hudson River R. R. Probably no train was on the tips of the tongues of our citizens as the truly famous "Empire State Express", tho' the present "Twentieth Century Limited" has done much to dim the popularity of the former. I doubt if there was any true American boy, growing up nearly forty years ago who never heard of the famous #999 and no locomotive has ever yet been built to dim the popularity of that one, tho' there were others designed by William Buchanan that were more capable. For years, our Treasurer, Mr. George Becker, has been a careful student of the motive power of the New York Central R. R. and he has made a most interesting contribution on the passenger engines of the late William Buchanan.

We welcome to our columns two new writers who have made contributions on interesting subjects. The Sandy River R. R. of the State of Maine, by Mr. Crittenden, has been most carefully treated and covers the history of a most interesting little road. To Captain Winfield W. Robinson, we are indebted for an instructive paper on the roads in the Catskill Mountains. Here again we find the activities of our old friend—Mr. John Leonard Driscoll, mentioned by Mr. Stuart in our BULLETIN No. 34.

The list of locomotives of the Boston & Maine R. R. is drawing to a close with the publication of the locomotives of the Fitchburg R. R. On account of numerical numbers, it was deemed best to divide this list, basing this division on the early locomotives and all locomotives of the Fitchburg R. R. proper, including those of the subsidiaries that came into the Boston & Maine. The locomotives of the subsidiary roads will appear in BULLETIN No. 38.

Lastly, your Editor wishes to express his thanks for the letters of sympathy which were received upon the death of his father. They will be acknowledged in time but the last few months have been unusually busy ones for those concerned.

Cover Design

Our fellow member and artist, Mr. O. Kuhler has again favored us with one of his sketches for our cover. The Hoosac Tunnel was constructed with its highest point in the middle of the tunnel thus causing the trains to drift through the last half as they proceeded in either direction. Mr. Kuhler has depicted Fitchburg R. R. #6 just as she emerged from the portal with her train and we are sure our members will appreciate the cleverness and skill of the artist.

Photographs for Sale

From time to time this Society has been adding to its collection of negatives of locomotives. A complete list of this material will appear in a catalogue which will be issued soon, listing the material on exhibition in the Baker Library. These negatives and the distribution of prints are now under the jurisdiction of Mr. Harold S. Walker, P. O. Box #65, Beach Bluff, Mass. The following prices are effective this date.

Size 116 or 616	\$.08 each
Size 4x5	.12 each
Size 3 3/4 x 5 1/2	.10 each
Size 5x7	.25 each
Size 8x10	.60 each

All orders for 50c or less should be accompanied by return postage. All orders for these prints and checks and money orders should be drawn in favor of Mr. Harold S. Walker.

Joint Meeting

The joint meeting between our New England members and those of our New York Chapter which was scheduled for May 26th and which was announced in our February report, has been postponed until this fall. The exact date has not been decided upon but our members will receive notice in sufficient time to attend this gathering.

The Catskill Mountain Lines

By CAPTAIN WINFIELD W. ROBINSON

THE region of the Catskill Mountains in New York State is too well known through verse and song to require any introduction to our readers. Every school child has read the story of Rip Van Winkle by Washington Irving and is familiar with a general description of this most beautiful section of high mountain peaks and fertile valleys. The greater portion of the region lies in Greene County, but it extends in long ranges into the adjoining counties of Albany, Schoharie and Ulster.

In early times the mountains and valleys were covered with immense hemlock forests upon which the settlers looked with longing eyes. The region was settled about the close of the American Revolution largely by immigrants from Connecticut, a few English from Manhattan Island and Holland Dutch from the settlements along the Hudson River. Previous to the war villages had sprung up at Rondout, Saugerties and Catskill Landing on the west side of the river. From these villages the settlers worked gradually westward into the heart of the mountains, attracted by the timber and the fertility of the soil. At the "Landing" or "Point" the Catskill Creek empties into the Hudson. The creek has its source in the northernmost part of the mountains where the three counties of Greene, Schoharie and Albany meet. From there it flows in a southerly direction through Greene County to the Hudson. It traverses a most beautiful valley and one today can easily picture its attractiveness to the pioneers. As they moved westward a wagon road was formed, following the creek to Schoharie County, thence following Schoharie Creek into the Valley of the Susquehanna. The mile stones on this original wagon road are still to be seen along the entire route.

As railroads began to come into existence in this country, one of the sections of New York State soon to receive attention was the Valley of the Catskill Creek. In the early part of the last century it was quite thickly populated. Commerce to and from the region was carried by ships from New York City to Catskill Landing, thence overland by oxen to the interior of the country.

In the state's files at Albany there is a record of the first railroad contemplated through this mountain section, the CATSKILL AND ITHACA, incorporated April 21, 1828, to "take, transport and carry freight and passengers between Ithaca and Catskill." No information can be secured as to the exact line intended to be followed after leaving Catskill Creek and it is very doubtful if any construction was ever attempted under this charter.

The next project was the CANAJOHARIE AND CATSKILL RAILROAD, incorporated April 19, 1830, which company completed in 1838 a road bed from Catskill to Cooksburg, a distance of twenty-six

miles. Wooden rails were laid, covered with a strip of iron. One locomotive was purchased in Paterson, N. J., which was delivered by steamboat from Jersey City. When placed upon the rails it would not move. Twice it was shipped back to the manufacturers in Paterson via boat to Jersey City, but each time when returned it failed to operate because steam would not act on its parts. The owners of the road finally gave up trying to use steam power and the cars were pulled by horses over the road, the traffic consisting principally of freight in connection with the tannery interests. Three miles east of Oak Hill this railroad crossed Catskill Creek on a wooden trestle and the large stone abutments of this bridge are still visible. Evidently the use of horses as motive power was not satisfactory, for the road was soon abandoned.

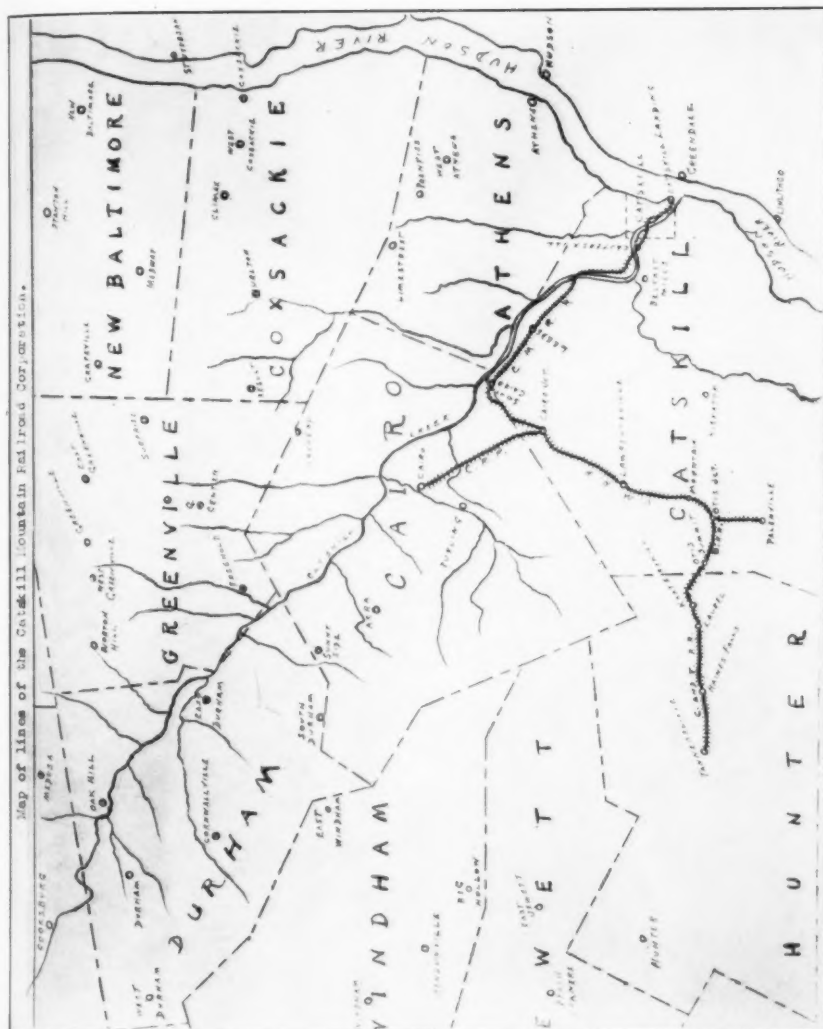
We next find the SCHOHARIE AND OTSEGO RAILROAD, chartered April 25, 1832, the incorporation papers showing the intention to be a rail connection between the Susquehanna Valley and the New York Central Railroad via Catskill. This must have been a paper project only, hatched up during the construction of the Canajoharie & Catskill, because there is no record of any activity beyond the organization of the company.

From this time there seems to have been a rather long period during which plans for a railroad lay dormant, for the next information we have is the incorporation, in the late sixties, of the CATSKILL AND MIDDLEBURGH RAILROAD COMPANY, proposing a narrow gauge steam railroad from Catskill village, following the abandoned right of way of the Canajoharie & Catskill, through the Valley of Catskill Creek, to the village of Middleburgh in Schoharie County. At this late date it cannot be determined whether or not anything was ever attempted under this charter.

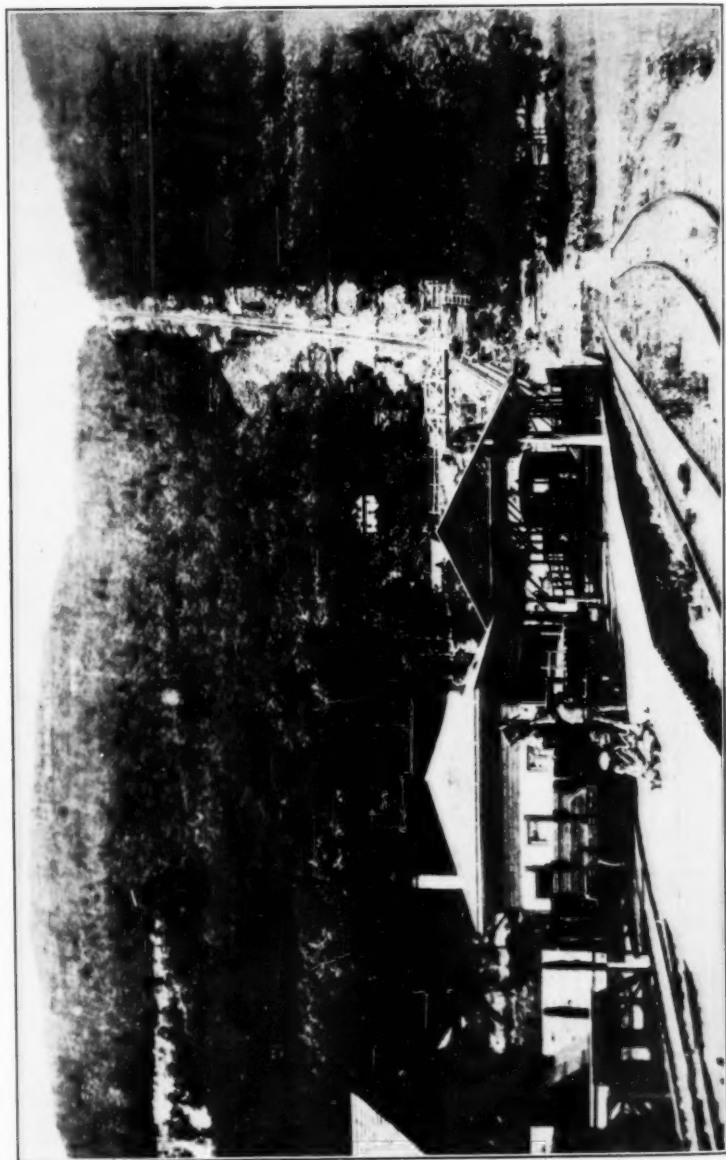
July 25, 1871 there was formed the CATSKILL AND SCHOHARIE VALLEY RAILROAD COMPANY, the articles of incorporation showing the intention to "construct a steam railroad from the village of Catskill in Greene County to the village of Central Bridge in Schoharie County, a distance of forty-five miles", following the general lines of Catskill Creek and Schoharie Creek. Nothing was done on this project and in 1876 the company was reorganized, the new officers reporting to the state authorities that no construction had been started.

Next we find the CATSKILL AND SCHOHARIE RAILROAD COMPANY, incorporated in 1879, to commence at Catskill Village, following Catskill Creek, northwesterly through the Townships of Cairo and Durham, to Cooksburg in Albany County, and thence into Schoharie County. Apparently nothing was ever done under this charter.

September 16, 1880 a number of prominent residents of the Village of Catskill, most of whom had been stockholders in the two previously mentioned Schoharie projects, organized the CATSKILL MOUNTAIN RAILROAD COMPANY. This movement was headed by Charles L. Beach, a most highly respected and successful business man who owned the large and exclusive hotel on the summit of Rip Van Winkle Mountain known as the Catskill Mountain House. He became President of the new



Map of Catskill Mountain R. R. Corp.



Otis Railway Branch, after Modification of Grade and Making Fill so that Loaded Freight Cars Could be Hauled.

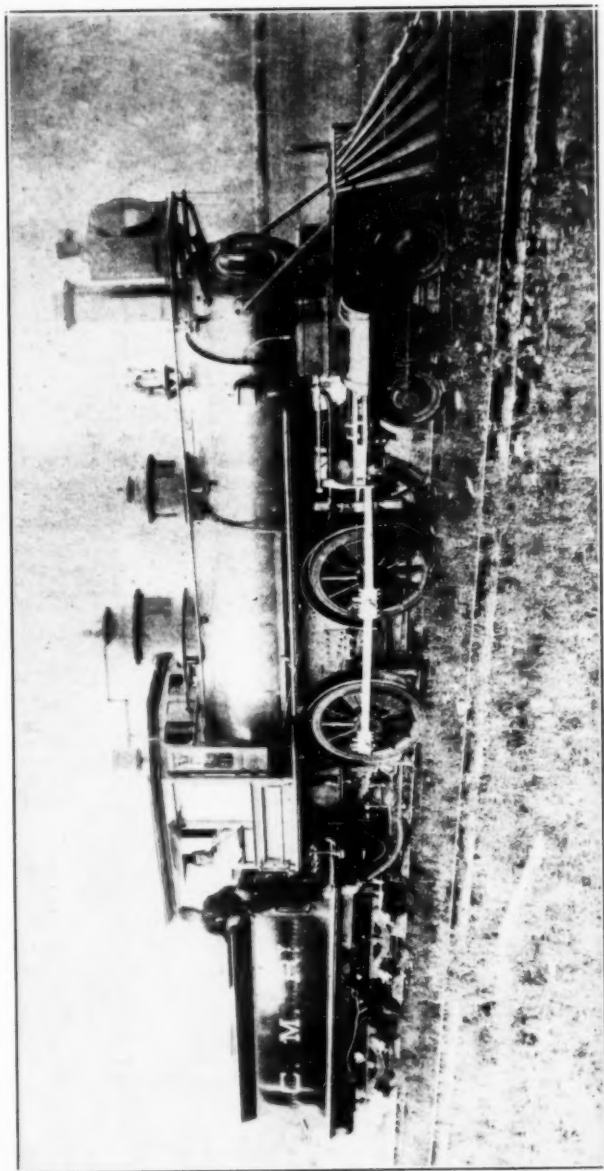


Shop Men at Catskill Landing, N. Y., During Winter.

L. to R., Rear Row: Frank J. Ruf, Engineer, Catskill; John L. Driscoll, Sup't. & M. M., Catskill; George Richter, Switchman, dead.
 Front Row: Wm. H. Driscoll, Engineer; dead. Jesse Oakley, Engineer; dead. James Salisbury, Carpenter; dead. Charles Long, Engineer, Catskill. Robert Osterhout, Car Knocker, dead.



Catskill & Tannersville Ry.



Catskill Mountain Ry. No. 1, "S. Sherwood Day," Dickson 1882.

railroad and had associated with him a most efficient Board of Directors of bankers and prominent merchants of Catskill. At this time the idea of constructing through to Schoharie County was given second place. The corporation functioned quickly. It constructed a steam line of three foot gauge from Catskill Landing, following the road bed of the Canajoharie & Catskill through Leeds as far as South Cairo, there leaving the old right of way and running southerly to Lawrenceville and Palenville, altogether about sixteen miles. By the summer of 1882 trains were running on this new railroad. This corporation then organized, in 1884, a branch known as the CAIRO RAILROAD COMPANY, and constructed three and three-fourths miles of single track narrow gauge line from a point southerly from South Cairo known as Cairo Junction, to the Village of Cairo. The road bed was promptly completed, tracks laid, and was operated under lease in conjunction with and as part of the Catskill Mountain.

Under a reorganization July 2, 1885 the CATSKILL MOUNTAIN RAILWAY COMPANY was formed as a successor to the Catskill Mountain Railroad Company.

The officers and directors of the original Catskill Mountain filed with the state authorities articles of incorporation, dated January 18, 1881, for the SOUTH CAIRO AND EAST DURHAM RAILROAD COMPANY, the purpose being to construct a continuation of the Catskill Mountain line from the village of South Cairo to the Village of East Durham, a distance of six miles. This was to have been the start of a line into Schoharie County. Work did not commence. January 16, 1894 the incorporators secured an amended charter, intending under it to continue the Cairo branch line through East Durham to Oak Hill, but this was never done.

The MIDDLEBURGH AND OAK HILL RAILROAD COMPANY was incorporated July 28, 1897, by a group of railroad promoters in New York City, to construct a single track steam railroad from Middleburgh in Schoharie County to Oak Hill in Greene County, a distance of twenty-five miles, to effect at the latter village a connection with the South Cairo & East Durham, the belief still being that this latter extension of the Catskill Mountain line would be constructed under the amended charter. The abandoned right of way of the Canajoharie & Catskill was still available for these lines. With the dropping of the S. C. & E. D. idea nothing was done further on the Middleburgh & Oak Hill.

The grand old man of the Catskill Mountain Lines is John Leonard Driscoll who now lives in peaceful retirement in Catskill village. On October 13, 1934 he was ninety-seven years of age. He enjoys good health for a man who has almost reached the century mark. In a description of the Dutchess & Columbia, very ably written by Mr. Inglis Stuart of Beacon, N. Y., in an earlier BULLETIN, he tells how Mr. Driscoll commenced as a locomotive fireman on a wood-burner on the old Hudson River Railroad in 1863; then went with the Dutchess & Columbia as its senior engineer and later with the Poughkeepsie & Eastern. Mr. Driscoll

coll did not stop with becoming an efficient engineer, but learned the trades of a boilermaker, locomotive machinist and pattern maker. His ability was well known in railroad circles. After the incorporation of the Catskill Mountain, Mr. Beach very wisely and fortunately secured Mr. Driscoll as the company's Superintendent of Motive Power and Master Mechanic. Mr. Driscoll arrived on the ground before construction was well under way and assisted in supervising the work. He brought with him two competent locomotive engineers, John Craig, and his son, William H. Driscoll, and these two piloted the first engines over the road. In the spring of 1882 locomotives Nos. 1 and 2 arrived from the Dickson Manufacturing Company of Scranton, both loaded on a brick scow. Mr. Driscoll soon had them on the rails, and that summer they were in regular service. Of the ten locomotives owned by the company it is said that never once during Mr. Driscoll's tenure of office did one leave its terminal that was not in first class condition. Every winter he supervised the complete overhauling and reconditioning of each engine and also built flat and box cars.

During the good old days this railroad did a land office business in the summer months. On holidays thousands of passengers were handled each day bound to and from the mountains. Trains were kept running late into the night time and they were long days for the employees. Boats leaving Catskill Landing for New York City often were held hours to accommodate the train loads coming in on the railroad.

Upon the death of Mr. Charles L. Beach his son, George H. Beach, succeeded to the Presidency, and the company operated its lines continuously, with more or less success, until the close of the year 1916. The volume of business was limited. For some reason or other the company had not been able to extend its line from Cairo into the fertile farming regions of northern Greene and Schoharie counties. Its territory was very limited. There was no interchange at Catskill with the West Shore Railroad and the only outlet for its small volume of traffic was the day and night line steamboats on the Hudson River and the ferry from Catskill Landing to Greendale on the east side of the river.

For the group of local people interested in the company the disadvantages seemed unsurmountable, and on April 30, 1917 the control of the line passed to the owners of the Hudson River Steamboat Company of New York City, a reorganization being effected under the title of the CATSKILL MOUNTAIN RAILROAD CORPORATION. This was a consolidation of the Catskill Mountain Railway Company, the Cairo Railway Company, the Catskill and Tannersville Railway Company (this being a narrow gauge line from Otis Summit to Tannersville, five and one-half miles, incorporated September 14, 1892 as a branch of the Catskill Mountain and called the "Huckleberry Line") and the Otis Railroad Company, the latter being an inclined cable line from the foot of Rip Van Winkle mountain at Palenville to the summit, one and eight-tenths miles. The entire trackage of the new corporation was twenty-three miles.

Under this last reorganization the property was operated two years. Fate was against the line and the hand of progress eventually proved

too strong. With the coming of improved highways private automobile, bus and truck competition was more than the little railroad could stand, depending largely, as it did, for its revenue from summer residents and visitors, and in 1919 the rails were taken up. Its locomotives, rolling stock and equipment were sold to narrow gauge short line and logging railroads in the southern states, Mexico, Cuba and South America.

Looking backward today, after fifteen years of abandonment, one can plainly see the fatal mistake that was made, and that was in making the road to Palenville the main line, when it should have been only a branch line. The old original idea should have been adhered to, i. e., the main line through the valley to Catskill Creek to a connection at Middleburgh with the Middleburgh & Schoharie Railroad, this latter road having an interchange near Central Bridge with the Albany & Susquehanna Division of the Delaware and Hudson. Had this been done, this story of fate undoubtedly would be different.

One particular feat of Mr. Driscoll deserves attention. The Otis Railway originally was very steep; there were two passenger cars, one at each end of a cable and as one car went up the other went down, passing each other on a siding half way up the incline. Any freight had to be unloaded from the trains at Otis Junction and Otis Summit and placed in these passenger cars and the same performance repeated at the other end of the incline. At the foot of the incline there was a long wooden trestle. Mr. Driscoll saw quickly that this system could be improved. He had the grade reduced by digging at the top of the summit and where the trestle was he had made into a long fill with a gradual ascent. A hoisting engine was placed at the summit. Arrangements were then made to couple freight cars on the rear of the Otis' passenger coaches and thus loaded cars could be hauled to the top of the mountain without unloading and there delivered to the Tannersville trains. This was a real achievement.

This story would not be complete without bringing to the reader's attention a man who is a shining example of perseverance, efficiency and achievement and who, had it not been for the unfortunate ending of the railroad, would have risen to a prominent position with the company. Mr. Driscoll still refers to this man as "his boy Frankie" (he is now crowding close on to seventy years) because he served under him from boyhood to manhood and no superior ever had a more faithful, loyal and helpful assistant. I speak of Frank J. Ruf, Assistant Master Mechanic, retired, now of Catskill. As a youth, without means and little opportunity to secure an education, Mr. Ruf spent a season on the Catskill ferry boat, at a mere pittance of a salary, to study steam engines, learn economical operation, etc. He then presented himself to Mr. Driscoll who appointed him a locomotive fireman on the Catskill Mountain. By diligent application to his duties and under Mr. Driscoll's tutorage he soon became a most efficient engineer and at the close of the railroad's life was in charge of the company's mechanical service.

LOCOMOTIVE RECORD

(All 3 ft. Gauge)

Catskill Mountain Railroad—Main Line

<i>Number</i>	<i>Name</i>	<i>Type</i>	<i>Builder</i>	<i>Year</i>	<i>Disposition</i>
1	S. Sherwood Day	4-4-0	Dickson	1882	Sold upon abandonment.
2	John T. Mann	4-4-0	Dickson	1882	Wrecked in 1918 and sold for junk.
3	Charles T. VanSantvoord		Dickson	1885	Scrapped.
First 4	Charles L. Beach	4-4-0	Schenectady	1893	Burned up in engine house fire 1908.
Second 4	Charles L. Beach	4-4-0	Schenectady	1909	Sold upon abandonment.
5	Alfred Van-Santvoord	4-4-0	Rogers	1912	Sold upon abandonment.

Catskill & Tannersville Branch

1	Isaac Pruyn	2-6-0	Baldwin	1900	Sold upon abandonment.
2	Alfred V. S. Olcott	2-6-0	Baldwin	1900	Sold upon abandonment.

(When the Catskill & Tannersville line was first constructed they purchased two second hand locomotives, narrow gauge, from the Denver & Rio Grande R. R. These had been wood burners, with balloon stacks, and were altered to coal burners before delivery to the C. & T. No one seems to remember the type of these locomotives or the builder. One was scrapped and the good parts used to repair the other engine and this latter one was eventually scrapped and the boiler placed in the Catskill Mountain Hotel.)

The S. Sherwood Day was sold to a logging railroad in Alabama when the Catskill Mountain Ry. was abandoned. Second No. 4 went to the same logging road. No. 5 went to one of the southern states. C. & T. Nos. 1 and 2 went to South America. Most of the passenger coaches and flat cars went to Mexico. The box cars went to a southern state. All the rails went to a narrow gauge railroad in the south.

Nos. 1 and 2 of the C. & T. were built with driving wheels inside the engine frame, the axles extending through the wheels, to which was attached a crank for the driving rods. This was so that they could be converted into standard gauge if desired at a later date.

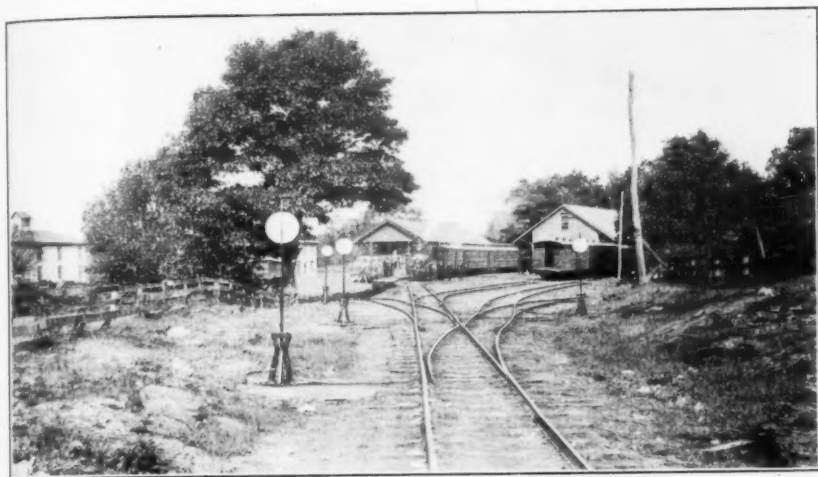
Catskill Mountain Railroad Corporation.

Locomotive Engineers.

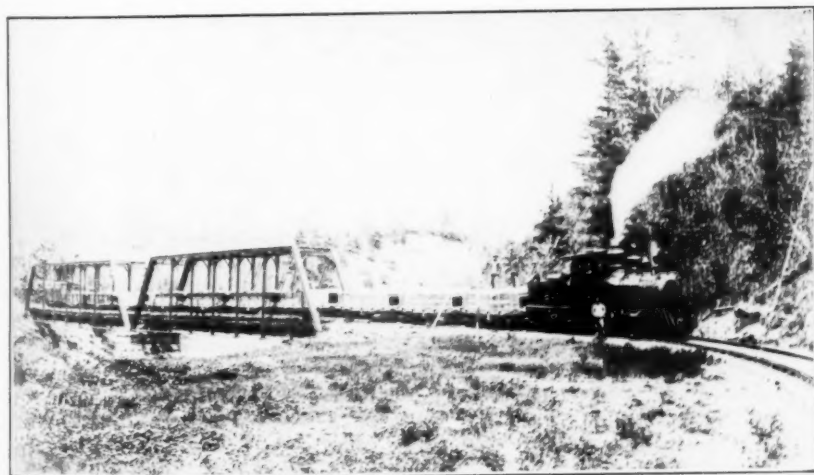
JOHN CRAIG. Came from the Poughkeepsie & Eastern in 1882. One of the first two engineers on the C. M. R. R. Became an engineer on a small saddle tank locomotive at the Alsen Portland Cement Works south of Catskill, in order to have steady employment year around. Is now chief engineer on the Jersey City electric railway.

WILLIAM H. DRISCOLL. Came from the Poughkeepsie & Eastern in 1882 and was one of the first two engineers on the C. M. R. R. Remained with the company until abandonment in 1919. Then went as stationary engineer in the Catskill Mountain Hotel where he later died of acute indigestion.

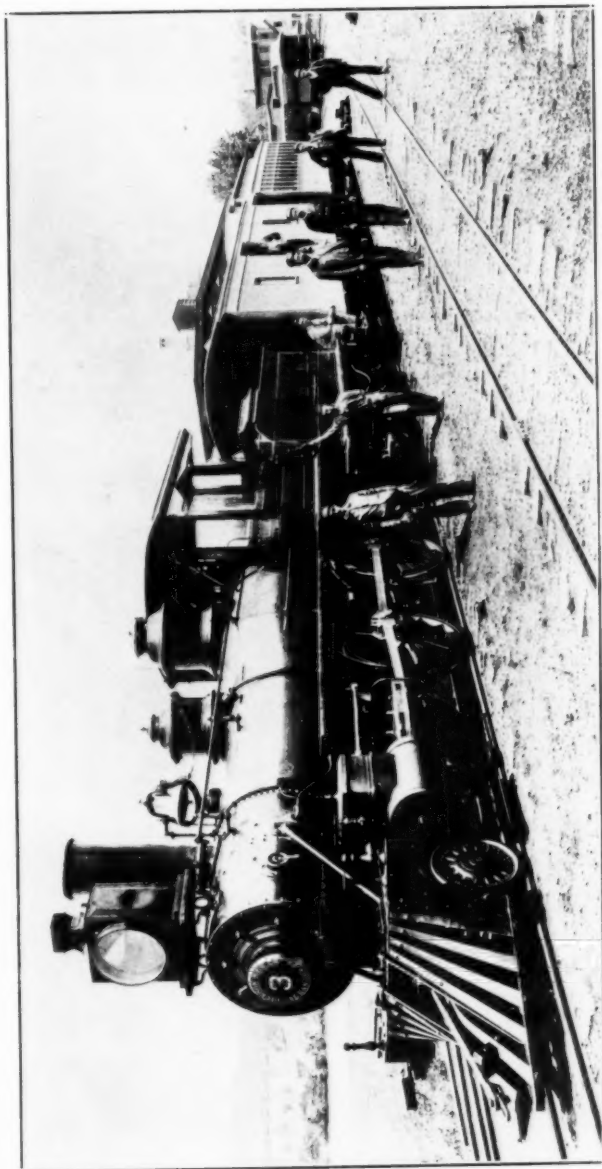
WILLIAM SHUFELT. Nicknamed "Katie". Was one of the first two firemen on the C. M. R. R. Was promoted to engineer when Mr. Craig resigned. Was later appointed engineer for the Catskill village water works, where he is still employed, living in Catskill.



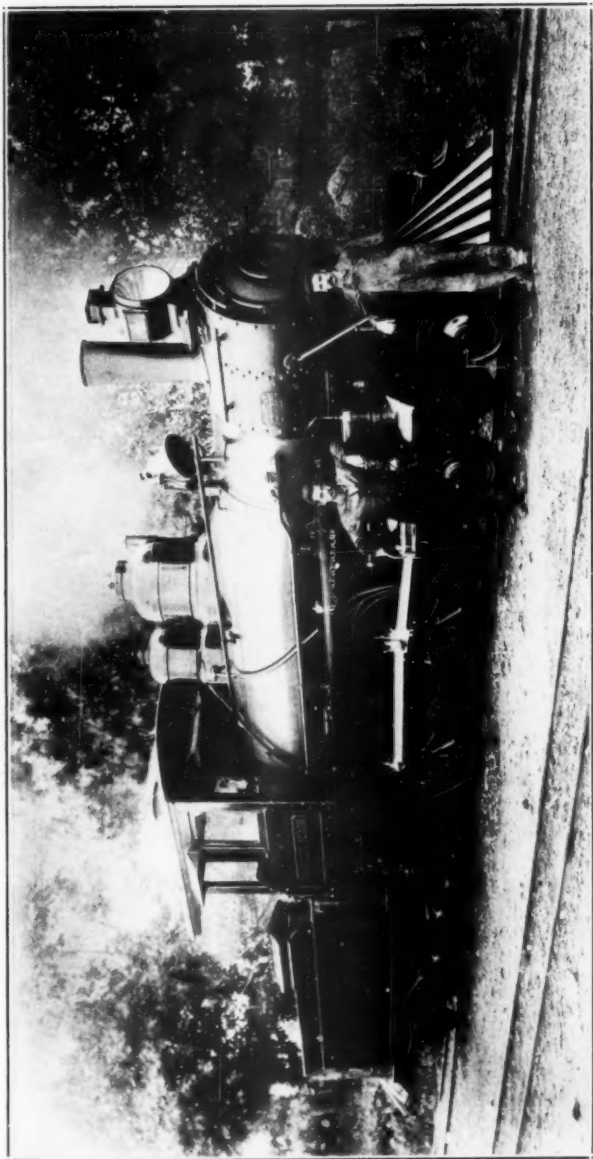
Railroad Yards, Cairo, N. Y. Cairo Branch of Catskill Mt. Ry.



Catskill Mt. Ry. No. 2 and Train



C. M. Ry. Locomotive 3 and Train at Catskill Landing, N. Y.
 L. to R.: Frank J. Ruf, Engineer; Edward Warner, Fireman; Burr Vaughan, Conductor; Ward Bogardus, Train Baggage-man; Edward Steenberg, Trainman; Percy H. Gardner, Trainman; Albert Cole, Car Cleaner, Sitting on Step; Kinsley Parkes, Fireman, Standing in Car Door. 1900.



Catskill Mt. Ry. Loco. 4, Schenectady, 1893. Taken in Railroad Yards at Cairo, N. Y., 1893.
L. to R.: Fireman, Kinsley Parkes; Engineer, Frank J. Ruf. This was First No. 4, which was later burned in the Engine House Fire at Catskill Landing.
December 7, 1908.



Catskill & Tannerville Ry. Branch of Catskill Mountain R. R. Corp., Year 1919.
Conductor Herbert O'Hara of Haines Falls, N. Y., Looking at Watch.

- ADDISON EDWARDS.** The second of the first two firemen on the C. M. R. R. Was promoted to engineer when the third locomotive (No. 3) was purchased. Resigned and went with the New York Central as fireman, was promoted to engineer, lost an arm in an accident in the West Albany yards and upon recovery was appointed locomotive despatcher in the Central's freight yards on West Street, New York City. Now retired on a pension and living in Brooklyn.
- CHARLES F. LONG.** Native of Catskill. Commenced as a fireman as a young man and eventually became an engineer. Upon abandonment of the road went to Watervliet where he was employed in a machine shop and where he lost an eye in a mishap in the shop and received permanent injury to one leg. Now retired and living in Catskill.
- FRANK J. RUF.** A native of New York City who as a youth was employed in the Catskill Mountain Hotel. Learned steam engines on the Catskill-Greendale ferry boat. Became a fireman on the C. M. R. R. and later engineer. Developed into a locomotive mechanic and was appointed assistant to the Superintendent of Motive Power and Master Mechanic. Upon abandonment of the railroad was locomotive machinist with the Alsen Portland Cement Company. Now retired living in Catskill.
- JESSE OAKLEY.** A resident of Windham. One of the early firemen on the road and rose to be engineer. Now deceased.
- ROY MCGLASHEN.** A native of Hensonville. Said to have possessed a born aptitude for engines, and was a most efficient man. Was a fireman but a short time when he was promoted to engineer. Now runs a steam roller on state highway work in Greene County, residing at Hensonville.
- CLARENCE W. GREENE.** A native of Clum Settlement, near Haines Falls. An early engineer on the Tannersville branch line. Now lives in Haines Falls and is employed on highway construction.
- WESLEY GREENE.** A brother of Clarence. Was employed as fireman and extra engineer on the Catskill & Tannersville when it was operated independently. Now deceased.
- EDWARD WARNER.** A Catskill resident. Employed as a fireman on the main line when quite young; was promoted to engineer and assigned to the Tannersville branch. Upon abandonment went to Norwich, N. Y., where he conducts a garage.
- CLAUDE H. HEATH.** A native of Tannersville. Some previous railroad experience on the Ulster & Delaware. Regular fireman and extra engineer on the Tannersville branch. Now an inspector of steam locomotives for the Public Service Commission of the State of New York and resides in Catskill.
- KINSLEY PARKES** of Freehold, now deceased, **RICHARD FALKE** of Durham, now in steamboat service out of New York City, and **WESLEY LEWIS** of Hunter, now in the gasoline station business at Pompton Lakes, N. J. These were the older firemen on the road who acted as extra engineers when occasion required their services as such.
- GEORGE HANDFORD.** He was the first conductor on the C. M., and came from the New York Central & Hudson River R. R., because of the poor condition of his health. The salary was no object to him; he wished to get into the mountains hoping thereby that his health would improve. He soon died.
- WILLIAM WHITCOMB.** He was a native of Catskill and had had some previous experience on the New York, West Shore & Buffalo R. R. Commenced as a trainman on the C. M., and upon Mr. Handford's death was promoted to conductor. He lived but four or five years after his promotion.
- WILLIAM BOGARDUS.** A resident of Jefferson Heights, formerly called Cauterskill, on the line between Catskill and Leeds. Originally a trainman on the C. M., he later was promoted to conductor and remained with the company until abandonment. Now conducts a gasoline filling station on the outskirts of Catskill village.

MARTIN BREWER. A native of Lawrenceville. He was a trainman on the main line. When the Cairo branch was opened in 1885 another passenger train was placed in service and Mr. Brewer was elevated to conductor. He was with the road over twenty years when death removed him.

BURR VAUGHN. A resident of South Cairo. Commenced as a trainman. About 1890 a daily second class train was placed in service to carry shale and clay from the section around Cairo Junction to the Catskill Shale Brick and Paving Company's plant at Catskill Landing. Mr. Vaughn was promoted to conductor and placed in charge of this train. Later he went into passenger service. He remained with the road until abandonment. Is now close on to eighty years of age and resides in Cairo.

PERCY H. GARDNER. Native of Palenville. Was passenger trainman on the main line and upon being promoted to conductor was assigned to the Tannersville branch where he remained until serious ill health forced his retirement and he now lives somewhere in the State of New Jersey.

JAMES H. LAYMAN. A resident of the Township of Hudson and the first conductor on the original Catskill & Tannersville. Remained in service many years and retired because of age. Now lives in Haines Falls.

HERBERT O'HARA. Haines Falls man. All his service was on the Tannersville branch, from the beginning of the road to the end, as trainman and conductor. Is now Postmaster at Haines Falls.

WARD BOGARDUS. Nicknamed "Old Rip." His home was at Kiskatom. Was passenger trainman and train baggageman and later conductor of the shale train, occasionally running in passenger service. Remained with the road until abandonment. Now deceased.

EDWARD STEENBERG, a Catskill resident, now deceased, and **ARTHUR DOWLING,** of Kaaterskill, now living in Palenville. These were passenger trainmen who acted as extra conductors during periods of illness of the regular conductors, on extra passenger trains during the rush periods, etc.

The Pennoyer Colored Prints

Many of our newer members may be interested in the set of colored prints which are reproductions made from the brush of that talented artist and fellow-member—A. Sheldon Pennoyer. The set includes "Snowbound"—a Crampton type of locomotive used on the Camden & Amboy R. R. in the fifties; the "Pioneer" of the Cumberland Valley R. R., built by Seth Wilmarth of Boston in 1851; "An American Express Train" drawn by a Rogers locomotive, built in the seventies; and, through the courtesy of the Delaware & Hudson R. R. we are able to include the "Stourbridge Lion", imported by that road from England in 1829. The size of the "Pioneer" is 7x11"—the other three are 8¼ by 10½". This size does not include the broad white margins. The price is \$5.00 per set and those of our members who have not procured a set are urged to do so. Orders should be addressed to CHAS. E. FISHER, 6 Orkney Road, Brookline, Mass.

Sandy River & Rangeley Lakes R. R. System

By H. T. CRITTENDEN

SANDY RIVER RAILROAD

ALTHOUGH the Billerica & Bedford Railway down in Massachusetts was adjudged a financial failure by its creditors, it made a profound impression on the people of the New England states.

In 1877, when the inhabitants of Franklin County, Maine, figured they were outgrowing ox carts and wagons, they invited George E. Mansfield to speak at Strong on the merits of a two foot gauge railroad. Mansfield had not yet faced the failure of his road in Massachusetts and was still aflame with enthusiasm over the narrowest of American narrow gauges. Just exactly what he said at the meeting we do not know but we do know that he left his audience as enthusiastic for the two foot gauge as he.

The low cost of construction was one of the main incentives for action and by the early part of 1878 a company had been organized by the business men and farmers for the construction of such a road.

Plans were made to build north from Farmington, where connection with the Maine Central would be made, to Strong and then west to Phillips. This road would tap the rich lumber country of western Maine and make it more accessible to other parts of the state. It was expected that most of the road's revenue would be derived from the transportation of long timber and sawn lumber.

When the B. & B. equipment was put up for sale in June, 1878, the company was able to take advantage of the opportunity and purchased the two engines, two passenger cars, a baggage car, five of the platform cars, and all of the iron rail. This equipment was stored at Farmington against the time it would be needed.

While the engines were in storage they were practically rebuilt as there were certain mechanical details that were not entirely satisfactory. Both engines were built to burn coal but they were converted into wood burners as the company found that good hard wood of various kinds could be supplied by the local farmers for from \$2.00 to \$3.00 per cord. Coal delivered at Farmington would have been much more expensive although at a later date the engines were converted back into coal burners. Several other alterations were made that were much more apparent. A sand dome was placed on the boiler and the bell mounted on top of it, the headlight was taken off the cab and mounted on the smoke box, the cowcatcher was placed on the front end, and finally each engine was given a number and the name was painted out. The engine that carried the name "Ariel" on the B. & B. became No. 1 while her twin the "Puck", became No. 2.

The two engines were built by the Hinkley Locomotive Works of Boston, Massachusetts, in 1877 and were built to operate with the tank

end leading. Hence an engine that would normally be classed as a 0-4-4 became a 4-4-0 but the Sandy River was not pleased with the idea and turned them around.

It was not until March, 1879, a request was made of the state government for a charter. It was granted April 8, 1879 and called for a \$50,000 bond issue and \$69,000 in stock. The company was titled the Sandy River Railroad Company after the river up whose valley the line was to be built. From previous inquiry the company ascertained that the towns to be served would take a large part of the stock. Other stock was subscribed by individuals but before it all could be disposed of, a share with a par value of \$50 was selling for \$10. In some cases farmers paid for their stock with corded wood and ties.

Practically all of the towns paid for their stock upon receipt except Phillips. This town must have been a little skeptical about the actual construction of the road for they wrote a clause into their agreement that stated a train had to run into the town over the proposed road on or before November 20th or they would not pay one cent on their \$14,000 stock subscription. Never-the-less, in June, 1879, ground was broken at Farmington and construction commenced.

Work progressed rapidly. The cost of grading, ballasting, trestles, and laying the 25 lb. rail was found to be \$1,500 a mile. This cost was ridiculously low, considering the topography of the section through which the road was built. When completed, the line was made up almost entirely of sharp curves and steep grades. The part of the track that was not so made up was a trestle and the company pointed with some pride to the fact that there were seventy-four of these structures in the eighteen miles between Farmington and Phillips. The largest trestle was over the Sandy River at Phillips and was eight hundred and fifty feet long and forty-two feet high. Practically all of these bridges have long since been replaced by fills and granite culverts.

On the morning of November 19th, the track was within a half mile of Phillips but the contractor was doubtful if he could have a train in town before the 21st. The inhabitants took no chances and turned out en masse. Stores were closed and merchants, professional men, and farmers together with all the laborers available put in the day and evening helping the contractor lay the last half mile of track. At 10:30 P. M. the first train, consisting of the work engine, presumably No. 2, and a flat car, crawled across the town line on the hastily constructed track and the town's aid was assured.

The company located the shops at Phillips. The original engine house was of wood and contained two pits and the turntable. The water tank was also housed. The repair shop had one track which would hold two engines. For years the only tools the shop contained were one thirty inch swing engine lathe, a blacksmith's post drill, a forge and an anvil. Power was furnished the drill and lathe by a small 5 H. P. engine piped up to the spare locomotive.

Engine No. 2, Joseph Marcue, engineer, was the regular engine while No. 1, Stephen Towmbley, engineer, was the spare engine. Marcue and Towmbley received \$2.00 per day each while their firemen received \$1.35

each. Later the rate was lowered to \$1.75 and \$1.20. Fred N. Beal was superintendent, conductor and mail and express agent. Rand Harden was baggage master and incidentally acted as brakeman. William Wag was road master. Charles Stewart was section foreman at Phillips, a Mr. Jackman at Strong, and a Mr. Rowe at Farmington. Each foreman had six miles of track under his care. Section men and laborers received \$1.10 per day. Joseph Jones was the master mechanic and received for a twenty-four hour day \$2.25.

Jones held the position only a very few months. It was part of his job to act as spare engineer if Towmbley or Marcue was not available. During a severe snow storm he took No. 1 and started ahead of the morning passenger train as pilot. One mile out of Phillips the snow became so thick it obscured his vision and before he realized it his engine passed out on the curved trestle at an excessive rate of speed which caused her to topple over. The engine was thoroughly smashed while Jones and his fireman were badly hurt. Both men were sent to the hospital and ultimately recovered but Jones never came back to the narrow gauge.

The engine was righted, hauled to the engine house by ox teams and stored until a new master mechanic could be found to recondition her.

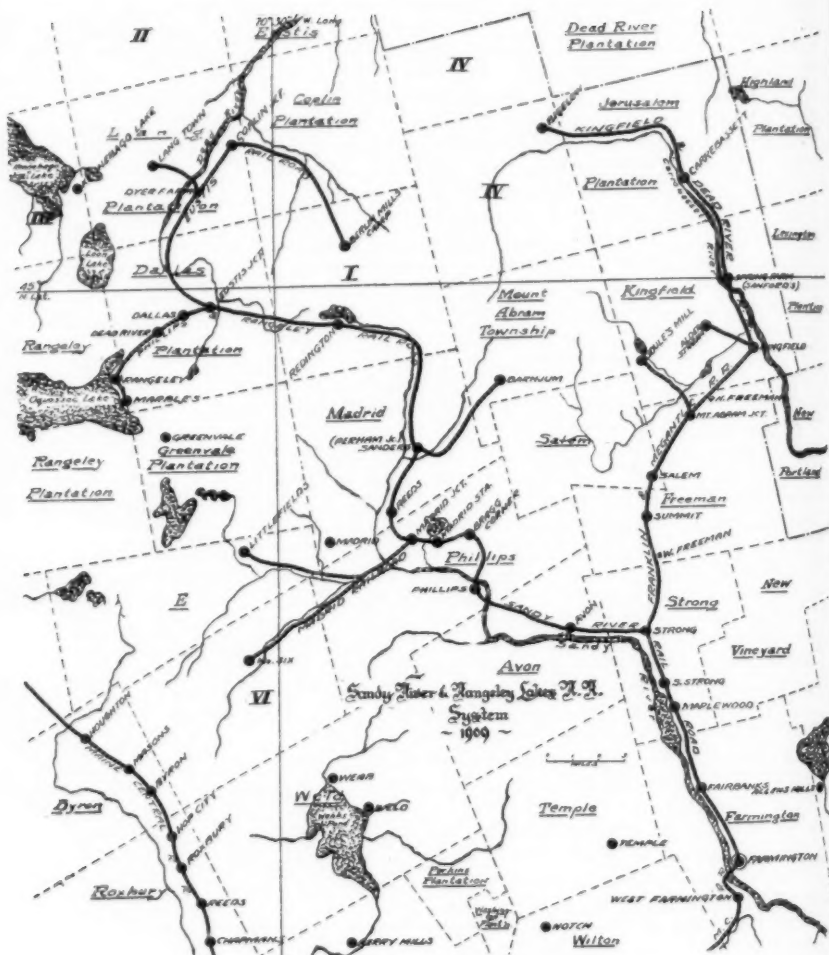
After some time Manassa Saunders was brought over from the Portland shops of the Eastern R. R and was elected and appointed master mechanic by the directors in 1880. He continued as such until 1892.

Saunders made an excellent job of repairing No. 1 and soon had her back in operation. The only alteration apparent was the balloon stack that was mounted in place of the little diamond stack which had folded up when the engine crashed.

It seems that Nature tried her best to close the road down during the first few winters of its existence. The snow storms were terrific. At Fairbanks the snow cuts would be above the tops of the cars and at times a train would get stuck for twenty-four to forty-eight hours. The conductors would bargain with the farmers along the line to feed the crew and passengers. To meet just such an emergency small wood sheds were built every six miles along the line. Water for the engines was obtained by shoveling snow into the tank and blowing steam back through the injectors. In 1884 a passenger train was three days covering the distance from terminal to terminal. The drifts were so deep in places that the snow had to be thrown up a second time to get it clear of the track.

The first snow plows were bolted to the front of the engines. The first flanger was a simple V shaped affair fastened to the draw bar of a flat car and operated by a long lever. No covering was provided for the operator and it was a terrible place for a man in bitter cold storms. Timothy Stewart, a section hand, was given the doubtful honour of being its operator. Later on Saunders built a 4-wheel covered-in flanger with coil springs and standard type flanger. It rode hard but had a stove and was comfortable. The first 8-wheel snow plow was built in 1886.

Following the snows, spring thaws caused the Sandy river to flood and pretty near washed the little road away. Service was completely



Sandy River & Rangeley Lakes R. R.

paralyzed until whole sections of the road-bed could be replaced. Ever since the first winter it has been a constant battle between the weather and the railroad, snow blockades in winter and rushing torrents that washed the line away in spring and early summer.

Gradually the road added to its freight equipment until by 1882 they had four box cars, seven platform cars, and two service cars besides the original passenger equipment. As to actual earnings, the company was not doing so well. The September, 1880, report placed the net profit for the first year at \$383.69 while the report for 1881 placed it at exactly \$18.32. The only thing that can be said is that the road was not running at a loss.

By 1884 this slim margin was wiped out and a deficit of \$2565.34 took its place but during the three years that the deficit was accumulating the company was building and purchasing equipment. Actually the road was operating at a profit.

The road's third engine, No. 3, was delivered in 1883 by H. K. Porter Company. Unfortunately the engine proved too heavy for the light rail and was stored until heavier rail was laid a year or so later. Even then the engine was not looked upon with much favor. Later another engine, No. 4, was purchased, this time from the Portland Company, and ran as extra. Sometime during 1882 or '3 a combination car was obtained. This car was hauled in place of the passenger and baggage cars hauled previously.

The heaviest traffic was during the winter when sled after sled of timber and lumber was delivered to the road at Phillips for shipment. The personnel and equipment was taxed to the limit to keep the road open and trains rolling. A large amount of general merchandise and food stuff moved north from Farmington every month in the year.

During the winter the train out of Phillips at 6:30 A. M. consisted of engine and combination car. Freight out of Phillips at 12 N. consisted of engine, combination car, and six or seven cars of lumber which was about all an engine could pull. Service from Farmington to Phillips was about the same. Passenger running time was one hour and fifteen minutes. Freight was one hour and forty-five minutes, or more, depending on the freight to be picked up. Not very fast time was made on the runs. The fastest time from terminal to terminal was made by Guy Everett who covered the distance in thirty minutes. Although his record stood for some time it has been beaten by a few minutes with heavier power and on better track.

In 1890 No. 2 went to the Phillips & Rangeley R. R. as "Bo-peep". This left the road rather short of motive power but a year later three little ten-ton 0-4-4 Forneys were delivered from the Portland Company. They were numbered 5, 6, and 7 and were all exactly alike.

The Wiscasset & Quebec purchased No. 3 in 1894 and ran her as No. 1. Number 4 was sold around the same time. Nearly all the two foot gauge roads, as they opened, came to the Sandy River for motive power. It was an excellent way to dispose of obsolete power and as it was sold the company brought in heavier engines. A few of these were Moguls which were converted into Prairie type engines by the Sandy River &

Rangeley Lakes. In fact, even today the little 2-6-2's are called Moguls. The majority of the engines were 0-4-4 and 2-4-4 Forneys.

The narrow gauge received a blow in 1895 when the standard gauge Portland & Rumford Falls R. R. was extended to Oquossoq. Quite a bit of the freight formerly over the line was routed over the P. & R. F. but the logging business, which was slowly but steadily increasing, kept the road more than busy. That year the company made a net profit of \$4600, cut its total indebtedness to \$118,109 and paid a dividend.

A parlor car was purchased from Jackson & Sharp Co. of Wilmington, Delaware, in 1901 and was the pride of not only the railroad company but of all Franklin County. Although the car was built to order and was one of the most expensive additions to the roster of passenger equipment she was stored after only a few years active service. The "Rangeley" is exactly like any other parlor car, except smaller, and has single seats on each side of the aisle. It is divided into three compartments and will seat about twenty-six passengers, sixteen in the parlor compartment, four in the smoking compartment, and about six in the observation end.

With the increase in weight of motive power and wheel tonnage it was found advisable to relay the main line with 52 lb. steel. The old 36 lb. steel was used to replace the 25 lb. iron of the sidings. This was the second time the weight of the rail was increased. The heavier steel made it possible for any one of the five engines owned at the time, 1904, to haul more tonnage than before and to be operated at a higher rate of speed with safety.

When the Phillips & Rangeley was completed, through trains were run from Farmington to Marbles and as business increased and summer passenger service brought increased revenue to the various lines, the directors of the Sandy River came to the conclusion that a consolidation of the various roads into one system would benefit each road materially, particularly the Sandy River. They pointed out that if the consolidation could be made and if enough new line could be built to connect with the Wiscasset & Quebec, it would give central-western Maine a direct route to the seaboard and an open port the year round.

With this plan in view, in 1902, a right-of-way was cleared east of Strong, several miles of grade thrown up, and heavy wooden trestles built. Construction of new track cost money and the treasury was in no position to stand the strain. The construction end of the plan was finally abandoned but the consolidation idea cost nothing and so was pushed.

For some time the company worked on the other roads trying to get them to agree to a merger but only one line, the Franklin & Megantic, was at all sympathetic. The directors finally gave up using arguments and tried other means, more expensive but surer.

The directors organized a new company known as the Sandy River & Rangeley Lakes Railroad Company on January 30, 1908. The charter gave the company the right to acquire by purchase, lease, or by a mutual agreement the connecting narrow gauge lines. Armed with a new charter and with the Sandy River R. R. as a nucleus the company set about to

acquire the other roads. With the organization of the new company, the Sandy River lost its identity and became, for a time, the Sandy River & Rangeley Lakes R. R. Later it was only a small part of that road.

FRANKLIN & MEGANTIC RAILWAY

FRANKLIN & MEGANTIC RAILROAD:

The organization of the Franklin & Megantic Railroad Company was completed on January 1, 1884 and was granted a charter on July 1, 1884. The completed line, which ran from Strong, Maine, where it connected with the Sandy River R. R., to Kingfield, Maine, was opened to traffic on December 10, 1884. Twenty-five pound steel was used to lay the fifteen miles of track. None of the excitement or enthusiasm accompanied the opening of this road that was evident at the completion of the Sandy River.

The estimated cost of the road was \$100,000. The authorized capital stock was \$500,000 while only \$42,000 was paid in as of December 1884. First Mortgage bonds amounting to \$50,000 were authorized but not immediately issued although they were later on.

The first engine was a Portland Forney type and was claimed to be the first engine on the Maine narrow gauge roads to be fitted with Eames Company vacuum brakes. She carried two Hancock inspirators for boiler feeds. Dan Cushman was her engineer and incidentally he was the road's first master mechanic. The engineer of the second engine, which was an outside frame Baldwin, was Chas. Baker who at times was relieved by a Mr. Goff. Both engines were woodburners.

In 1886 the Mountain Branch, 1.7 miles long, was opened. This branch was laid with 40 lb. iron rail and was built as a logging spur into the woods.

The equipment was listed as of December, 1890, as two engines, one passenger car, one express and mail car, and thirty-two freight cars. Another thing that was listed that was not so encouraging was an accumulated deficit of \$2,948.86. The following year the company purchased six more freight cars.

Although no attempt was made to increase the amount of motive power or passenger equipment, the number of pieces of freight equipment was steadily increased until by 1895 we find they had seven box cars, twenty-one flats, four logging trucks, and eight service or road cars. Also the company managed to accumulate a surplus of \$598. This was probably achieved by defaulting on the interest of the outstanding bonds for on June 3, 1897 the bondholders organized a new company to take over the road.

On August 16, 1897 the road was turned over to the new company and became the Franklin & Megantic Railway.

FRANKLIN & MEGANTIC RAILWAY:

Previous to the transfer of title to the line, the company had operated the Kingfield & Dead River R. R. although there never had been any agreement entered into between the two companies. The F. & M.

trains simply ran on to Carrabasset instead of tying up at Kingfield, the terminal of the two roads. The newly organized company continued this arrangement.

On August 2, 1898 when the K. & D. R. was put up for sale by its creditors, Josiah S. Maxey, president of the F. & M., bought it for his company. The road promptly lost its corporate identity and became part of the Franklin & Megantic.

It was the desire of the officials of the F. & M. to extend their line into Canada and as soon as the purchase of the K. & D. R. was completed they requested the state court for permission to make the extension from the Carrabasset end. The Phillips & Rangeley had also made a request of the court for an extension into Canada so out of fairness to both roads the court denied the extension right to either. While the final decision was hanging fire the F. & M. extended their road from Carrabasset to Bigelow, six miles, mainly to serve a large sawmill built by Governor Prouty of Vermont and a partner, and partly to be within a fair striking distance of the Canadian line. Later on this extension was removed but the road continued to serve several wood turning mills at Kingfield. The extension was opened to traffic in 1899.

In 1903 the equipment of the company consisted of the same two engines, a combination baggage and passenger car, a baggage and mail car, six box cars, and thirty-seven flats. Long timber and lumber made up the majority of the revenue freight.

The F. & M. was one of the first three roads to merge with the Sandy River to form the present Sandy River & Rangeley Lakes System. Both the F. & M. and the K. & D. R., which was actually part of the former, became part of the system in February 1908 and immediately lost their rights as separate and distinct roads although they were spoken of for several years as connecting lines.

PHILLIPS & RANGELEY RAILROAD

A group of Massachusetts men, owners of a township of virgin spruce timber, organized the Phillips & Rangeley Railroad Company on April 17, 1889. The company was granted a charter the same year and immediately commenced construction of a line of track west from Phillips, Maine.

When the rails reached Redington a large sawmill was built there. This mill had a capacity of fifty thousand feet of long lumber daily and it was mainly as a feeder for this mill the line was constructed. By December 31, 1890 the road had reached Dead River, about twenty-four miles from Phillips, and the grading had been completed to the western terminal, Rangeley, Maine, a beautiful little village on the shore of Rangeley Lake.

The company figured that the road cost them as it stood, uncompleted, \$197,000. The charter called for a capital stock of \$75,000, or 750 shares with a par value of \$100, of which only \$73,410 had been paid in. There was a funded debt of \$125,000.

On July 1, 1891 the entire line was opened from Phillips to Rangeley, 28.6 miles. The track was laid with 35 lb. steel, some of which has

never been replaced. When the S. R. & R. L. took over the line in 1908 they gradually increased the weight of the steel between Phillips and Redington but west of Redington the light rail remained until the whole road was scrapped.

The rolling stock, as of December 1891, consisted of three engines, two passenger cars, two baggage cars, five box cars, thirty-five flats, and ten road and service cars. One of the first engines on the road, if not the first, came from the Sandy River R. R. She was originally Sandy River No. 2 but was named "Bo-peep" when she went into service on the P. & R. by Daniel Davis, the master mechanic. About the same time the company purchased an engine from the Portland Company and gave her both a name and a number. She was the "Calvin Putnam" and carried the road number "1". Engine No. 3 came from the Baldwin Works in March 1891. In March 1893 the company purchased one other piece of motive power, an 0-4-4 Forney, from Baldwin, which carried the road number No. "2". This brought the total number of engines owned up to four. These engines were the only ones the company ever owned although they leased the three engines of the Eustis R. R. in 1904 and ran them as their own.

From the very first the road was a financial failure. It was never able to meet expenses much less pay a dividend. Probably the owners, or we should say the promoters, never expected it to be a profitable investment but considered it only as a means of transporting timber from and to the mills at Redington. If such was the case, it was certainly hard on those who had invested their life's savings in the company in the hopes that it would bring them even a small return on their investment. By the first of 1896 the road had run into the red to the amount of \$5,652 and by the middle of 1908 it had built up its deficit to \$11,542.

During the early 1900's the company applied for permission to extend the line from Rangeley into Canada but as the Franklin & Megantic had also applied for such permission the request was denied. It has been claimed that the P. & R. backed the Eustis R. R. in 1903 in hopes that the little road would be granted permission to make such an extension. If this claim is true the P. & R. was sadly disappointed for the Eustis fared no better than the larger road.

Although we cannot speak with certainty concerning the relationship that existed between the P. & R. and the Eustis, we do know that the P. & R. was the guiding hand back of the Madrid R. R. This line was constructed in 1903 under a separate charter but was merely a logging feeder for the P. & R. As soon as it was projected far enough into the woods to be of any value it was turned over to the larger road for operation. Unlike the Eustis, the Madrid owned no equipment. The P. & R. went through the formality of leasing the Eustis but simply took the Madrid over on "an agreement with the owners". The "owners" being certain officials of the P. & R.

The financial condition of the company became so bad that the court appointed, upon request of the bondholders, Seth M. Carter receiver on January 30, 1905. Carter took over the reigns of not only the P. & R. but of the Madrid and the Eustis as well. Under the receivership, the

road did very little if any better and it became a case of holding off the inevitable as long as possible.

Early in 1908 the blow fell when the bondholders closed down on the company. At a foreclosure sale on July 1, 1908 the road was purchased by the Sandy River & Rangeley Lakes R. R. If one wants to know the actual case, the chances are the S. R. & R. L. had quietly bought up all, or nearly all, of the bonds and so was in a position to force either a settlement or a sale. As the road was certainly in no position to pay the interest on the bonds it was sold out. The Madrid R. R. was sold as part of the P. & R. but the Eustis reverted back into an independent line and continued its separate existence with Carter as receiver.

At the time the road was sold it owned four engines, three passenger cars, a combination car, a baggage car, fifteen box cars, sixty-seven flats, fourteen coal cars, and four service cars. Back in 1895 they listed a caboose but it unaccountably disappeared from the records after that year. It is understood, however, they owned a caboose at the time of the foreclosure sale.

KINGFIELD & DEAD RIVER RAILROAD

The Kingfield & Dead River Railroad Company was chartered on June 19, 1893. The track which extended from Kingfield, Maine, the northern terminal of the Franklin & Megantic R. R., about ten miles to Carrabasset, Maine, was completed and ready for the operation of trains on August 1, 1894. For four years the road was operated first by the Franklin & Megantic Railroad and later by the Franklin & Megantic Railway, their successor. No agreement was ever entered into but it is quite likely a small amount was paid for the use of the track. The K. & D. R. owned no equipment although the track was laid with 35 lb. steel in anticipation of the ultimate purchase of some.

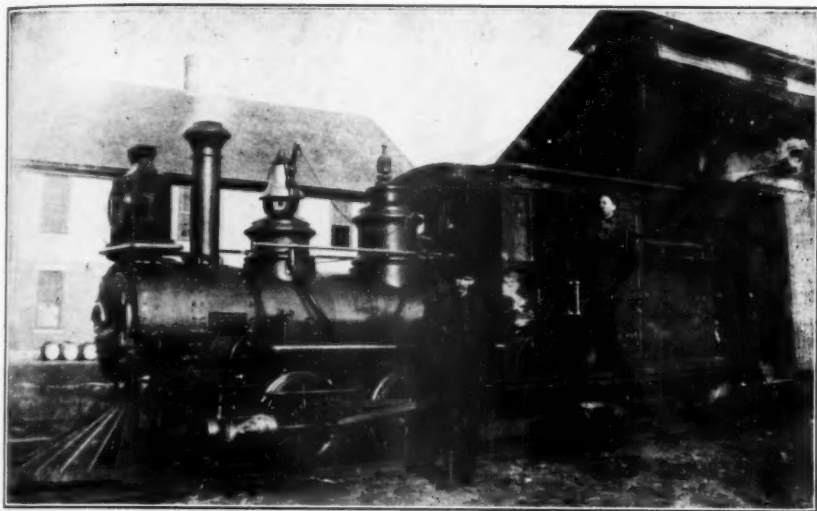
The company could not meet the interest payments due on its first mortgage bonds and the bondholders foreclosed. The entire line was sold on August 2, 1898 to Josiah S. Maxey, president of the Franklin & Megantic Railway, who immediately turned it over to his road by which it was absorbed.

Although the forced sale actually terminated the life of the road as an independent company, the charter was still in force and continued so until February, 1908, when the S. R. & R. L. absorbed both roads. In 1899 the line of the K. & D. R. was extended by the F. & M. about six miles to Bigelow but later on this extension was almost completely removed.

EUSTIS RAILROAD

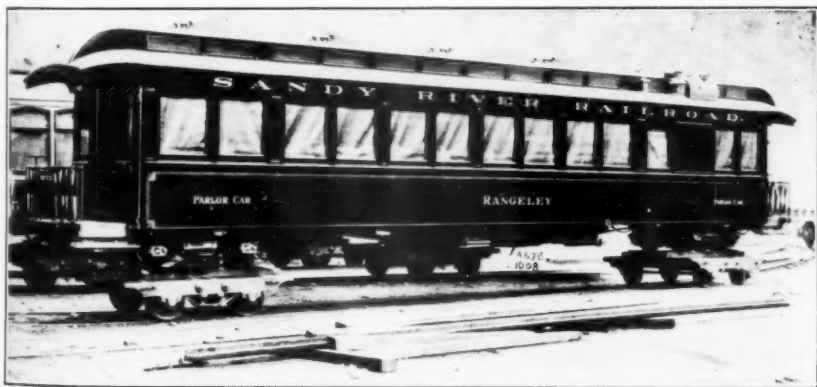
The Eustis Railroad Company was chartered April 29, 1903 and was opened the same year. The line extended from Eustis Junction on the Phillips & Rangeley to Berlin Mills Camp, Maine, approximately fifteen miles, and was laid with 35 lb. steel. The charter called for a capital stock of \$48,000.

Unlike the Madrid R. R. which was chartered at the same time, the Eustis had its own rolling stock. The three engines were all 0-4-4 For-

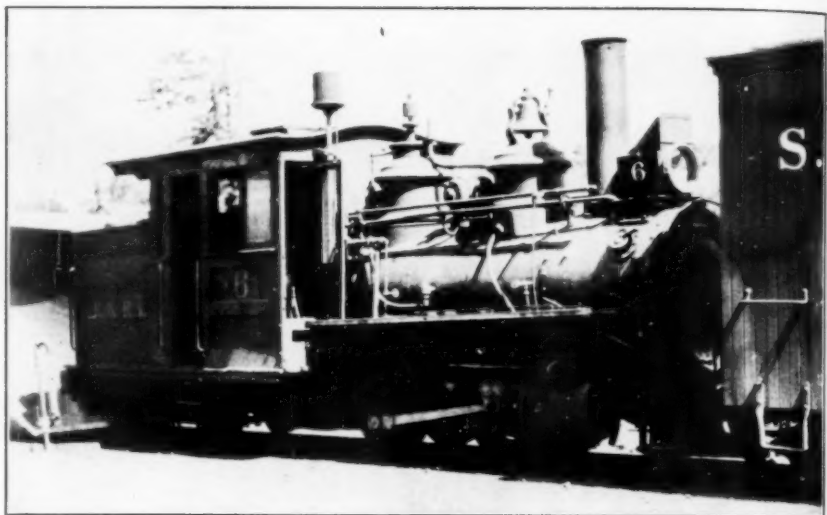


Sandy River Railroad #1

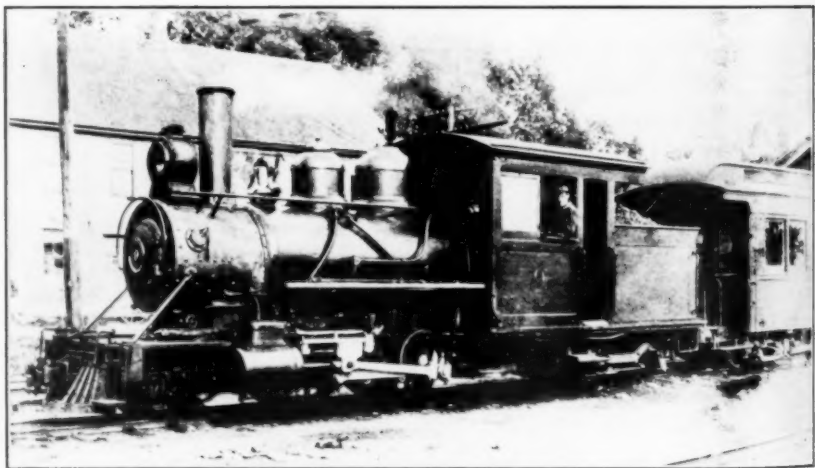
Built by the Hinkley Works for the Billerica & Bedford where she ran as the "Ariel". Built in 1877.



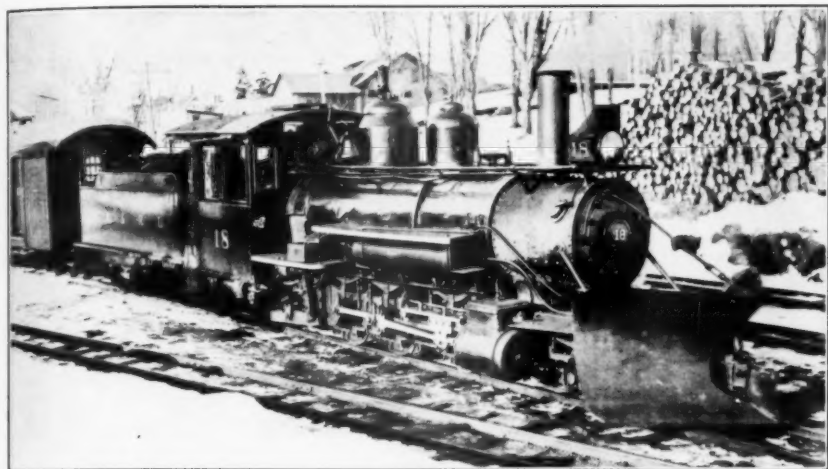
Sandy River Railroad Parlor Car "Rangeley", Jackson & Sharp Co. 1901



Sandy River & Rangeley Lakes #6. Portland Co., 1891.
Sold by the S. R. & R. L. to the Kennebec Central as #4. Finally sold to the Wiscasset, Waterville
& Farmington as #9



Sandy River & Rangeley Lakes #9. Baldwin, 1909

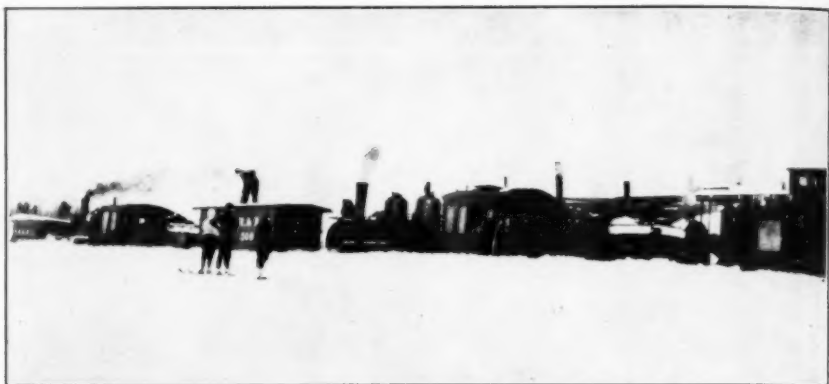


Sandy River & Rangeley Lakes #18
Built by Baldwin in 1893 for the Sandy River. Ran as #2, a 2-6-0, on that Road.



Photo Courtesy L. W. Moody, Union, Me.

Sandy River & Rangeley Lakes R. R. Rolling Stock Used to Reopen the Road.



Clearing the Line After the Blizzard of March 1921

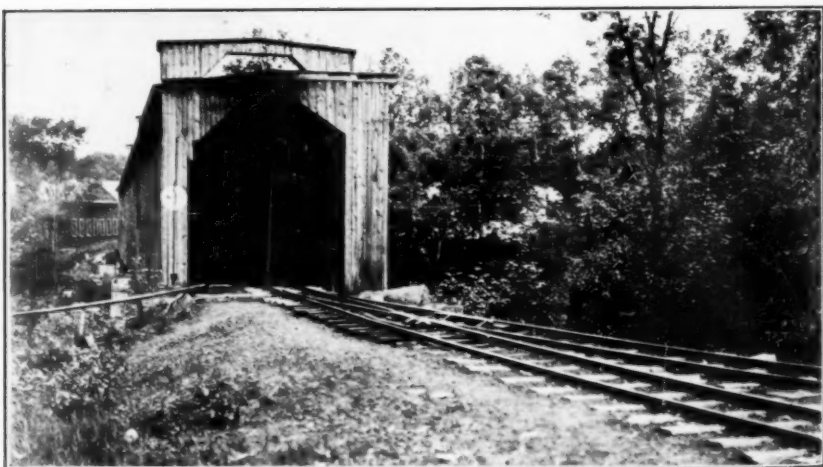


Photo Courtesy L. W. Moody, Union, Mo.

Sandy River & Rangeley Lakes R. R.
 Bridge over the Sandy River Just West of Phillips. Spur to Right Leads to old P. & R. Roundhouse

neys built by Baldwin. Engine No. 7 was built in 1903 while No. 8 and No. 9 were built in 1904. Besides the three engines, the company owned twenty-five flat cars.

The company was organized primarily for the hauling of long timber out to the main line of the P. & R. where it could be picked up and conveyed to the mills at Redington. The road also fostered a hope it would be the line that would eventually be allowed to build into Canada.

It has been said that the Phillips & Rangeley was the actual cause of the construction of the Eustis and that it was P. & R. money that financed its construction. The story goes that the P. & R. hoped that if they failed in the desired extension over the national line, that the Eustis might get it. Whatever the actual conditions were neither road benefited along that line for when the Eustis requested permission for such an extension, it was flatly refused. However, there is no doubt that the Eustis was built as a feeder for the P. & R. regardless of who furnished the money for construction.

The road had hardly been completed and started operating when it was leased to the P. & R. with the understanding that the larger road would pay all operating and maintenance expenses. On January 30, 1905 the two roads were placed in the hands of a receiver, Seth M. Carter, who operated them until July 1, 1908 when the P. & R. was sold at foreclosure sale to the S. R. & R. L. At that time the Eustis was turned over to the S. R. & R. L. by Carter to be operated. This arrangement continued until the road was finally sold at foreclosure sale in 1911. It was purchased by the S. R. & R. L. and became part of that system, being known as the Eustis Branch.

MADRID RAILROAD

The Madrid Railroad Company was chartered on April 29, 1903 and as soon as the necessary materials could be obtained construction was commenced from Madrid Junction, Maine, on the Phillips & Rangeley R. R. This junction came into being when work was started on the new road and was about a mile west of Madrid Station on the present S. R. & R. L. before that Phillips-Rangeley section was removed.

It was the original intention of the company to project the line from Madrid Junction in a wide arc through the village of Madrid to Redington, Maine, a distance of about sixteen miles, where connection would again be made with the Phillips & Rangeley. The original plan was not adhered to but the line was run directly southwest 6.4 miles to Number Six. This line, which was laid with 35 lb. steel, was opened on June 30, 1903. Later a branch was built from the main line at a point which came to be known as Brackett Junction to Littlefields, now known as Sandy River.

It is generally understood that the company was financed by the P. & R. and the line constructed mainly as a feeder for the mill at Redington. The company owned no equipment but as soon as the line was open the P. & R. began operating trains over it on a short time agreement. Whether the P. & R. went through the formality of paying for the

use of the road is hard to say but it is quite likely they used the track merely as a logging branch and did not bother to enter it on the books of either company. As the same officials ruled both roads such a procedure would save much time and trouble. The organization of a separate company released the P. & R. from any legal obligations arising out of the construction of the branch.

On July 1, 1908 the Phillips & Rangeley was sold at foreclosure and the Madrid was sold as part of that road. The S. R. & R. L. purchased both companies and continued their operation.

SANDY RIVER & RANGELEY LAKES RAILROAD

On January 30, 1908 the Sandy River & Rangeley Lakes Railroad Company was organized for the purpose of acquiring and forming into one system the various connecting twenty-four inch gauge railroads in Franklin County, Maine. The Sandy River, the Franklin & Megantic, and the Kingfield & Dead River, a subsidiary of the F. & M., were acquired and consolidated in February. These three roads served as a nucleus for the proposed system.

The idea of a narrow gauge system of railroads for Maine originated in the minds of the members of the board of the Sandy River Railroad and they interested the F. & M. in the scheme to the extent the line agreed to a consolidation with the S. R. The K. & D. R. would naturally be included in any move the F. & M. made.

The company purchased the Phillips & Rangeley and one of its feeders, the Madrid R. R., at a foreclosure sale on July 1, 1908 but was unable to purchase the other feeder, the Eustis R. R. This was the only independent narrow gauge road connecting with the system left in the county and the S. R. & R. L. did not obtain it until 1911 when it too was sold at foreclosure. However, in 1908 the company entered into a contract with Seth M. Carter, receiver for the Eustis, to operate the road.

As soon as possible the motive power of the various roads was pooled at Phillips. The engines that were in the best condition were renumbered, relettered, and placed in service. The remainder of the engines were either sold or scrapped. Among the engines scrapped was the P. & R. "Bo-peep" and the Sandy River No. 1, originally the "Puck" and the "Ariel" of the Billerica & Bedford.

The passenger and freight equipment was also pooled, renumbered, relettered and redistributed. The best of the passenger equipment was placed in service on the main line while the older cars were run on the branch lines.

Both passenger and freight service was maintained on the various branches. A passenger train made two trips a day from Coplin Junction on the old Eustis line down to the main line at Eustis Junction. A freight made one round trip a day from Phillips out to Coplin Junction. At first these trains operated out to Berlin Mills Camp but the track from Coplin to the Camp was eventually torn up. Identical service was maintained on the old Madrid line. The first year the company paid a dividend of one percent on the outstanding stock, or \$2,416, out of the net profit of \$6,355.

Soon after the merger the various state courts reviewed the requests of the narrow gauge roads for permission to build into Canada. As all the roads requesting such permission had been consolidated into one system, the S. R. & R. L. was granted the right to extend the Eustis Branch or the main line from Rangeley to the Canadian border, a distance of about twenty miles. The court rulings also gave the company the right to connect the Eustis Branch and the Dead River Branch so that trains could be run into a loop.

If the courts had handed down such a decision ten years earlier one of the roads probably would have extended its line across the border but by this time standard gauge roads had made such an extension a worthless investment by building into the section that would have been served by the narrow gauge. The company never took advantage of the court rulings in any way.

In 1911 the Maine Central gained control of the S. R. & R. L. by buying up a majority of the stock. This was done at the dictation of the New York, New Haven & Hartford which was then the most powerful railroad in New England and, for that matter, probably still is. The next year the company began to increase its rolling stock and to replace obsolete equipment. A combination baggage and mail car was obtained besides twenty-five box cars and a like number of flats. An engine was rebuilt with a new boiler. Last of all eight freight and two passenger engines were ordered to be delivered as early as possible. For some reason these engines were never delivered but the motive power in service was given a thorough shopping. The same year air brakes were installed on some of the freight equipment, to be exact, four engines and a hundred ninety-three cars. At the same time three of the engines were rebuilt with new boilers. The rest of the freight equipment was fitted with Westinghouse brakes in 1916 along with four passenger cars and engine No. 2. Engine No. 18 was completely rebuilt with a new boiler and air brakes that year.

In 1919 the road hauled 70,000 cords of pulpwood at which time the peak of prosperity was reached. The same year the equivalent of 5,000 standard gauge box cars of freight was moved westward and 1,000 eastward besides a large number of passengers and much miscellaneous freight. The freight revenue for that year totaled \$350,000 but immediately began to drop off.

The extensive advertising campaigns put on by the M. C. boosting the Rangeley Lakes section brought many people to that district. During the summer months it was not unusual to carry as many as four hundred passengers on one train. The enormous amount of wild game attracted many sportsmen.

An amusing story is told of an engine crew on the morning passenger train from Strong to Carrabasset quite a few years ago. The train was laboring slowly up a steep grade near Carrabasset when the fireman sighted a deer. Without mentioning the fact he seized his rifle, which was apparently standard equipment with all railroad men on the S. R. & R. L., and dropped off the engine. At practically the same moment the engineer saw a deer on his side and without noticing the

absence of his fireman, dropped off his side without bothering to shut off the engine. Luckily the conductor saw his engine crew on the ground and promptly climbed over the tank into the cab. He shut the engine off and there the train sat until the two men returned. That evening the superintendent called both men up before him for leaving the engine but instead of taking the reprimand humbly both were highly indignant over not being allowed to stop and hunt should the occasion arise.

During the peak, the stock that had once sold for ten dollars soared to seventy-five and paid a dividend of twenty percent. Every engine the company owned and about twenty crews were kept working night and day. Three passenger trains daily made the trip from Farmington to Rangeley with others making the run from Strong to Carrabasset. The freight business was held up by the enormous demand for pulpwood and long timber. Main line extras were run as fast and as often as loaded cars could be picked up and made into a train. In spite of the actual need for it the heaviest equipment was never sent above Redington or over the tracks of the former Franklin & Megantic. The rail was considered too light while on the old F. & M. there was the added danger of light trestling. The S. R. & R. L. had not replaced any of the structures on this line since they took the road over and although the bridges might have carried any load imposed on them, the company figured there was no sense in running any unnecessary risk.

The little line was a real railroad in every detail. Every station had its telegraph operator and trains were dispatched. Every piece of rolling stock was equipped with air brakes and was inspected regularly. The right-of-way was extremely well kept. The 52 to 60 lb. rails on the line from Farmington to Redington were kept in perfect alignment as were the 35 lb. rails of the rest of the road. All of the track was grassed out and well ballasted with rock.

In 1909 the company purchased a new single unit engine from the Baldwin Locomotive Works and ran her as No. 9. Four years later they purchased the largest two foot gauge engine ever constructed, No. 23, a Prairie type freight engine, and in 1916 they brought out No. 10, a single unit passenger engine. Both of these engines came from the Baldwin Works. In 1919, as business soared to new heights, they purchased their last engine, No. 24, a Prairie type freight and passenger engine. Sometime, around 1919, the roundhouse at Phillips burned and just about ruined the motive power. However it was rebuilt and the equipment reconditioned. It is practically impossible to trace the motive power from the consolidation in 1908 or the date of purchase to the present, for every master mechanic has renumbered the engines to suit his fancy. Even the records of the company cannot be relied upon for they were not interested so much in the history of a piece of motive power as in the condition it was in. Practically every engine has been rebuilt, some several times, and so many changes have been made that it is hard to recognize the original engine.

As the road passed its prosperity peak, tonnage began dropping off at an alarming rate. Conditions became so bad that on July 1, 1923 receivers were appointed for the road. For a time they were able to

stem the tide but with the increase in numbers of trucks and busses and with their increase in popularity, things went from bad to worse. When the receivers were appointed, the Maine Central relinquished its claim on the narrow gauge and turned the stock over to J. S. Maxey of Gardiner, Maine, who, with H. S. Wing of Kingfield, Maine were and still are the receivers. This placed Maxey in the unusual position of not only being a receiver but also virtually the owner.

By 1928 the revenue from freight had dropped to \$189,000 and by 1930 \$130,000. The passenger revenue had fallen way below \$10,000 per year. In spite of the fact that the line had once been able to operate on less than 55% of its gross earnings it was in a bad way. Drastic retrenchments were made which included the scrapping of engines 8, 15, and 20. The next year, 1931, showed the revenue down to around \$100,000, still falling but a bit slower.

Steam trains between Phillips and Rangeley were taken off in May, 1931, for the summer. At that time the road had four of its ten engines in service. Six of them were stored and had been for some time. With the discontinuance of the two trains to Rangeley, only two engines were left in service, No. 16 pulling a mixed train between Farmington and Carrabasset and No. 24 hauling pulpwood. A rail bus took over the Farmington-Rangeley run, but the following winter, when steam trains were put back in service on account of the snow, the run from Phillips to Rangeley was discontinued on account of lack of funds to keep the line open.

In 1931 the road had 290 freight cars, most of which were stored on sidings. It also had six passenger coaches, two combination cars, two baggage and mail cars, five snow plows, eighteen cars for company service, two rail busses for passenger and express service, two rail motors for company service, one rail motor for freight and two motor trucks which were used on the highway. Then there was the parlor car that has been stored for more than twenty years at Kingfield. The chances are it will never run again as a regular unit of a passenger train. For a road the size of the S. R. & R. L., its financial condition was rather poor at the close of 1931. After everything possible had been subtracted from the gross income, the company found themselves with \$47,370.66 on the wrong side of the ledger. That was for 1931 alone.

As the depression tightened its grip on business, the road was hard put to keep going. If it had not been for two pulp mills it could not have lasted six months. At first both mills flatly refused to use trucks to haul the pulpwood out of the woods and their business just about kept the road going. However the trucking companies were so persistent in their attempts to obtain the business that the two mills finally gave it to them. The S. R. & R. L. promptly folded up and on July 8, 1932 the last train was run. All of the equipment was stored but none of the rail removed.

Then came winter! Deep snows covered the state, the roads were covered by deep drifts and the snow plows sent out by the highway department could not break through. The mills ran out of pulpwood and the trucking companies were powerless to furnish it to them. The nar-

row gauge was out of business so the mills closed down as there was no chance of help from that direction. As soon as spring opened the roads, the trucks began hauling again but the mills had lost thousands of dollars in the meantime. One company, the Lawrence Plywood Company, immediately set to work to insure themselves against a second occurrence by petitioning the railroad company to reopen for business.

On April 17, 1933, the company started running trains again over part of the system. The track westward from Phillips was abandoned and was soon impassable on account of washouts. The branches were allowed to be overrun by second growth. The only part of the once extensive system reopened for operation was the old Sandy River from Farmington to Phillips and the old Franklin & Megantic from Strong to Carrabasset. During the spring of '33 a rail bus left Phillips twice a day for Farmington and connected with another bus from Carrabasset and Kingfield at Strong. A daily freight was run from Phillips to Carrabasset via Strong, back to Farmington, then back to Carrabasset and finally to Phillips. This train was run extra so that it could be cancelled any time business warranted. An extra engine was kept steaming at Phillips in case of emergency.

At the time the road was reopened, the management made an appeal to the people of the section to support the line. For a time the inhabitants routed nearly all their freight over the narrow gauge but gradually the highways are getting it back. Several other of the two foot gauge roads are watching the S. R. & R. L. to see just how much of a success it makes of its reopening, to see if it can be made to pay after being forced to close once. They seem to be gauging their prospects of staying in operation by the length of time the company keeps its trains running.

Accidents on the narrow gauge were not unusual but seldom serious. When an engine claimed the life of any of her crew, she was draped in black and wore her funeral dress for a month. There was the time a freight was on the old F. & M. and making good time but as she was skirting a mill pond the track suddenly dropped out from under her. The engine took to the water but remained upright. No one was hurt. Cause,—beavers undermining the track! Then there was the time a rock, about the size of a water bucket, rolled down upon the track and lodged between the rails. Unfortunately the rock landed at the end of a long curve and the engineer of the first train due, which happened to be a passenger train, could not stop the drag before it was too late. The engine hit the rock while still travelling about five miles an hour. The cowcatcher folded under the casting between the cylinders and tipped the engine over against the bank. Every car in the train followed the engine's lead and gently leaned over against that bank as if too weary to stand on its trucks. No one was hurt. Snow plows had a habit of running off on a tangent from the track. The engine usually took an opposite tangent. Dirty snow or ice was generally blamed for these derailments. It was an even toss-up as to how the crew fared on these unexpected cross-country trips.

During the middle of 1934 the company began pulling up the steel of the many branches radiating from the main stem and by October the

work was completed. The steel from the Eustis Branch, which was 43 lb., was used to relay the main line from Strong to Kingfield, while the other steel was stored at Phillips.

The Barnjum Branch was the first branch to go. This branch was built as a means of getting pulpwood out of the woods. At Perham Junction, where it left the main line and struck off to the east, there was only a couple of passing tracks, a gravel pit, and a wooden turntable that has suffered severely from fire and the weather. The branch swung off and immediately started ascending the mountain on a steep grade that was something over four percent and about a mile long. It then flattened out slightly, but continued to climb, and wound in and out along the ledge forty or fifty feet above the dank, shady riverbed clear to the end of track.

The old Madrid was the second to go and that line had become so choked with second growth that it was almost impossible to walk down the track much less run a train over it. The company had no sooner completed the stripping of the branches when they started at Rangeley on the old Phillips & Rangeley tracks. Every rail of that road clear down to Phillips was removed and hauled by truck to the Phillips yard to be stored. The end of December, 1934, saw that job completed and Phillips physically, as well as officially, the end of the narrow gauge.

Rangeley is completely isolated so far as rail service is concerned. Never again will a train whistle for the board at the throat of the yards there. The little three-stall engine house will probably be turned into a garage while the steel turntable will gradually rust away.

Regular service between Phillips, Carrabasset, and Farmington was kept up during the summer of 1934. A rail bus made two trips a day from Phillips to Carabasset, down to Farmington, back to Carabasset then home to Phillips. A steam train made the same trip once a day when there was freight and hauled a combination to take care of any stray passengers. A slight change from the 1933 schedule.

The motive power is in need of reconditioning but the company claims that only two engines at the most will be put in A-1 condition and that at the expense of the other motive power. The company has offered for sale any of the engines at the current price of old iron, which at present is around fifteen cents per hundred pounds. So far no one has availed themselves of the opportunity.

Walking down the track west of the station at Phillips, one soon clears the town and crosses a covered bridge over the Sandy river. Just clear of the west portal a spur runs off into the woods to the left. This spur is clear for about a hundred feet but after that, it is choked with second growth so thick that one is hard put to force his way through. Among the trees, and securely locked in place by them, is the running gear and frame of an engine sitting on the rails but hardly supported by the punk-like ties. Just beyond the engine is the old P. & R. turntable, the pit of which is merely a depression in the ground grown up with small trees shaded by larger trees until only a deep twilight prevails. The wooden table itself is so rotted that one hesitates to walk on the mould covered boards that form the walkway beside the rails.

Leaving the turntable and plunging again into the woods, but always following the scarcely discernible rails, one travels only a short distance when he steps into an unexpected clearing which is entirely taken up with a stone structure, locally known as the "Old Stone Fort". This was once the P. & R. roundhouse and machine shop. The top has long ago fallen in on the remains of engines rusting there, old S. R. & R. L. engines placed there after they had outlived their usefulness. The stone walls have fallen in places, pried loose by the trunks and roots of trees of the steadily encroaching forest.

Turning to your right you pass out of the building through what was once the machine shop and again enter the woods but force your way only a short distance when you come out on the main line. After you climb the fill and stand on the track you look back and see only a wall of green, a dense wood which apparently extends without a break for miles and miles. There is no hint that this particular section of the huge Maine forest covers what was once the yards of the P. & R.

Again cross the covered bridge, walk east past the station and you enter the present yards of the S. R. & R. L. You see a set of well kept sidings, an up-to-date machine shop, a large roundhouse with a steel turntable out in front, the coaling station, and the tracks from them all converging into the main line which passes out of sight over a slight rise to the east.

Stand at the throat of the yard and watch the daily freight come in. First you hear her blow for a crossing below town and then after a few seconds she tops the grade. Amid dust, cinders, and a cloud of smoke she pounds down the grade toward you. There is a roar, an overpowering odor of burning coal and hot valve oil, a violent gust of wind and the engine passes. The cars pound by you, roaring, rattling, then a short silence as the last car passes, almost immediately followed by much screeching as the brakes are set. Again silence and a peace settles over the yard.

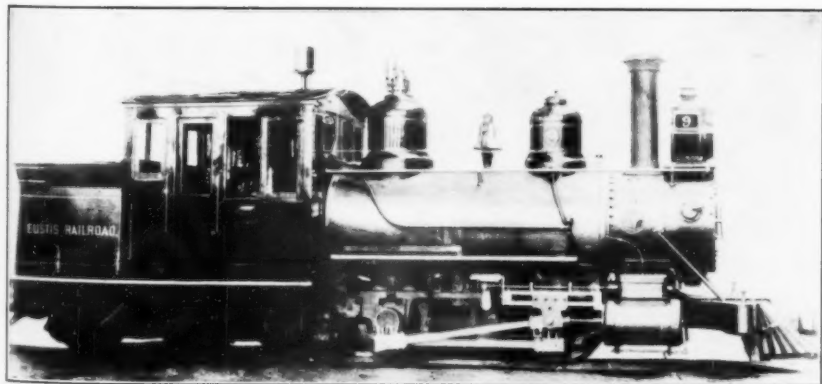
A few minutes later the conductor, there is no brakeman, cuts the engine loose from the rest of the train. The engineer runs her up to the first switch, the fireman drops off, throws the switch and catches the engine as she drifts down past him. Down past the train she drifts, on down to the throat of the yard where again the fireman acts as brakeman and turns the engine into the track to the turntable. On the table she climbs and creeps forward until the table is in perfect balance. The fireman and a couple of machinists put their shoulders against the bars and walk the table around until the engine points back towards the east.

As soon as the table is locked in place the engine backs slowly off and into her stall. Her fire is banked. Her engineer goes over her carefully, gathers his things together and starts for home. After a few minutes his fireman follows him. The doors of the stall are shut and the S. R. & R. L. settles down to await a new day.

EDITOR'S NOTE: Since this article was written, the S. R. & R. L. has been put up at auction, the rails and equipment sold. The last train will be run on June 30th, 1935.



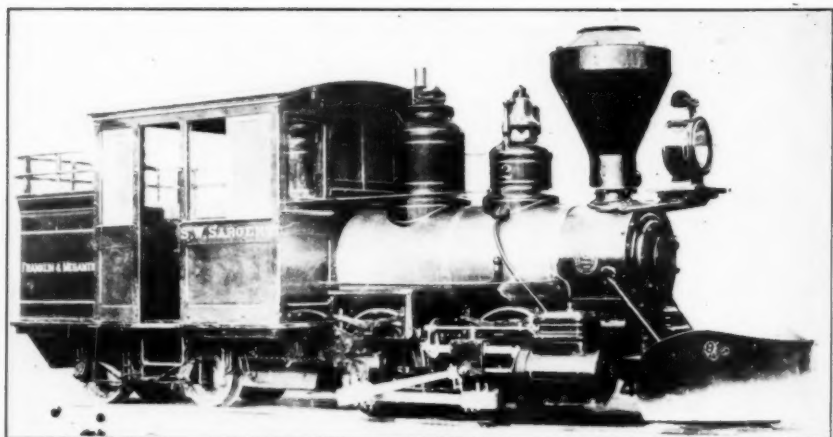
Phillips & Rangeley #1 "Calvin Putnam". Portland Co. 1890.
Went to the S. R. & R. L. as #7



Eustis Railroad #9. Built by Baldwin 1904
Went to the Sandy River & Rangeley Lakes as #22



Eustis Railroad. Logging at the Northern End. Engine Shown is #2 of the P. & R.



Franklin & Megantic R. R. #2 "S. W. Sargent". Built by Baldwin in 1886.

William Buchanan

By GEORGE P. BECKER.



HE 4-4-0, or American, type locomotive retained its popularity for passenger service for a longer time than any other type in American railway service, and it is doubtful if any locomotive, or class of locomotives, were acclaimed more extensively than those built for the New York Central & Hudson River Railroad under the direction of William Buchanan, as Superintendent of Motive Power and Rolling Stock.

Mr. Buchanan was born at Dunbarton, Scotland, on March 6, 1830, the son of a blacksmith. He came to this country as a boy and, in 1847, entered the service of the Albany & Schenectady Railroad as an apprentice in the machine shop at Albany. In 1849, before the Hudson River Railroad had been completed through to East Albany, he went with that road and served as machinist, locomotive engineman, and shop foreman, until in June, 1853 he was appointed Master Mechanic of the Southern Division, New York to Poughkeepsie. In 1859 he was appointed Master Mechanic of the entire road. After the consolidation of the Hudson River and New York Central roads, he was, in 1881, appointed Superintendent of Motive Power of the New York Central & Hudson River Railroad. This title was later changed to Superintendent of Motive Power and Rolling Stock, a position he held until his retirement in 1899. Two brothers were also in New York Central service, Archibald, an engineman on the Hudson River Division, and James, at one time foreman of the West Albany shops.

It appears to have been common practice in the early days of rail-roading, to rebuild and reboiler old locomotives and retain them in service rather than purchase new ones. This rebuilding was so complete that the rebuilt machines had not the slightest resemblance to the original, thus a locomotive built by the old Danforth & Cooke Locomotive & Machine Works in 1854 for the New York & Harlem, was in service on the Chatham & Lebanon Valley after 1900 with all the appearance of having been a locomotive built about 1880. This was doubtless about the time it was rebuilt. Many of the Hudson River Railroad locomotives were rebuilt at its shops at 31st Street in New York City, and this is where Mr. Buchanan received his first experience at locomotive building.

So far as we know, the first complete locomotive built by him was the "William Buchanan", No. 79, which was built at the 31st Street shops in 1865, and turned out in July of that year. It had cylinders 17x24 inches, driving wheels 70 inches in diameter, and weighing 40 tons. The "Wm. H. Vanderbilt", No. 80, built in August 1866, the "Reuben E. Fenton", No. 82, built in December 1867, and Nos. 84, 85, and 86, built in December 1869, were the same dimensions. Two others the Hudson River Railroad, No. 81, and No. 83, had 17x24 inch cylinders but 64 inch diameter driving wheels for freight service. The 83 was built in August 1868.

The "William Buchanan", No. 79, was rebuilt with a new boiler in 1881, renumbered 832 in 1890, transferred to the Dunkirk, Allegheny Valley & Pittsburgh in 1891, where it was assigned road No. 9. It was later renumbered 263 then 407 and taken out of service about 1903, after nearly forty years of service. The "Reuben E. Fenton", after thirty-three years service to its credit was taken out of service in 1900, having been renumbered 834 and 1120.

Locomotives of the above dimensions must have given good service as additional locomotives of the same dimensions were built at the shops of the company located at 31st Street in New York, West Albany, Syracuse, Rochester, and East Buffalo. Mr. Buchanan seems to have had the idea that competition between the various shops would cause them to produce a better product in locomotives.

His early experience with the Hudson River Railroad gave him some opportunity to observe high speed locomotives as the Hudson River and Harlem at that time were competing for the New York to Albany business and were using speed as one of the inducements. The Harlem also included a free dinner on arrival at Albany. Both roads tried locomotives with driving wheels of large diameter. It is stated that these driving wheels were as large as seven feet in diameter but the largest we find on record were 78 inches. The seven foot ones may not have been used for any length of time. The cylinders and boiler were not of sufficient capacity to furnish the power to turn the large wheels under severe conditions.

The Railroad Gazette, under date of November 4, 1887, contains the following item,—“Mr. William Buchanan, Superintendent of Motive Power of the New York Central, tells a New York Sun Reporter, that he has, with his engine No. 522, travelled three miles in two minutes and three seconds, or forty, forty-one, and forty-two seconds respectively.” This was at the rate of ninety miles per hour which was speed in those days. This locomotive was originally built at West Albany, in 1869 by the New York Central Railroad as No. 87, renumbered 522 in 1877 and rebuilt by Mr. Buchanan in the '80's, into an inspection engine. As such it had cylinders 13x22 inches, and 64 inch driving wheels and was the only 4-4-0 type of inspection engine on the road at that time. It was last in service on the Pennsylvania Division as the "Corning" No. 32. This seems to have been the locomotive which piloted General Grant's funeral train from Albany to New York on August 5, 1885. No. 503, one of the 17x24 inch locomotives, built at West Albany in October 1884 hauled the train.

On August 8, 1886, another of these company built engines, No. 541, having 17x24 inch cylinders, 70 inch driving wheels, built at the Syracuse Shops in April 1885, covered the 70 miles, from Syracuse to Fairport, at the rate of 68.73 miles per hour.

Late in the year 1887, he built at West Albany shops a locomotive with 18x24 inch cylinders, 70 inch driving wheels, 145 lbs. boiler pressure and weighing about fifty tons. This locomotive had an increased heating surface but practically the same grate area as the 17x24s. Locomotives of this class, which were built at West Albany, Schenectady, and Rome, to the number of twenty-three, also in 1889, ten more, five each

from Schenectady and Rome, with still greater heating surface, 155 lbs. boiler pressure, and an added square foot of grate area, were remarkable in their performance, they were very soon overloaded with the increasing traffic. Many of these locomotives were equipped with a firebox, designed and patented by Mr. Buchanan. In this firebox, a water arch divided the firebox into two parts with a combustion chamber above the arch, through which the gases had to pass on their way to the flues.

It now became apparent that still larger locomotives were needed to handle the increasing traffic and maintain the fast schedules demanded by the Passenger Department. Mr. Buchanan was now confronted with this problem. While some builders had turned out locomotives with larger cylinders, the then conventional design with the firebox between the frames, limited the grate area which was so essentially necessary for greater steaming capacity.

To overcome this difficulty, he brought out a design with the firebox above the frames, thus obtaining about fifty percent additional grate area. With this increased grate area a corresponding increase was provided in heating surface and the cylinder diameter was increased slightly. The first of these locomotives, Nos. 860 to 871 inclusive, were received from the Schenectady Locomotive Works in March and April 1890. Twenty-one more were received in the last three months of the same year. These were numbered 872 to 892 inclusive.

While 19x24 inches was the cylinder dimensions of these locomotives and 180 lbs. boiler pressure, sixty tons total weight, there were varying diameters of driving wheels of which the record is not very definite. It seems from the builder's record that all of these were ordered, and perhaps built with 70 inch diameter driving wheels, but in the final adjustment the 870, 871, and 872 were equipped with 78 inch diameter driving wheels. In 1893 the 872 and 888, also the 903, built in 1892, were tried out with 84½ inch driving wheels. The 872 and 903 were later changed to 78 inch and the 888 to 70 inch. By March 1892 fifty-three of these locomotives had been received from the Schenectady Locomotive Works and placed in service on the road.

We will now refer to the press of that day for a report of their performance. The Railroad Gazette, June 26, 1891, gives an account of a run made by the New York and Chicago Limited, which, being delayed in Grand Central Station yard, left there two hours and five minutes late and arrived in Buffalo but twenty-five minutes late. This train, consisting of six cars, weighing, with the locomotive and tender, 358 tons was handled by Nos. 870, 864, and 861.

So remarkable was the performance of these locomotives that on September 14, 1891, a special train was operated from New York to Buffalo to demonstrate their ability to maintain high speeds on long runs. Engines were changed at Albany and Syracuse as was the custom in regular service at that time. The train left Grand Central Station at 7.30 A. M. and arrived in Buffalo at 2.50 P. M. The actual running time, exclusive of stops, was 425¾ minutes for the 436½ miles, or an average of 59.52 miles per hour exclusive of stops and slow downs. The train weighed 130 tons exclusive of locomotive and tender which added another hundred tons. The locomotives used were 870, 876, and 862.

The fastest previous long distance run on record being that of the Scotch Express on the London & Northwestern, in England, which, in August 1888, made 400 miles at the rate of 55.4 miles per hour with a train of ninety tons exclusive of the locomotive. The performance of the Buchanan engines, therefore, brought forth much favorable comment and praise from the press on both sides of the Atlantic.

As a result of this experimental trip, the "Empire State Express" was placed in service and made its first trip out of Grand Central Station on October 26, 1891. With Archibald Buchanan at the throttle of the 870, the train left at 9.01¼ A. M., and although, owing to improper coal being loaded on the 876 which took the train out of Albany, Engineman Tom Dormody pulled into Syracuse 8 minutes and 45 seconds late. Engineman Charles H. Hogan and the 862 landed the train in Buffalo at 5.43 P. M. This was three minutes late but as it left Grand Central Station 1¼ minutes late Mr. Hogan thought 1¾ minutes out of the way on a 440 mile run should not count and the passengers agreed with him.

The "Empire State Express" was at once recognized in this country and abroad as the "Fastest Long Distance Train in the World". The fame of the train spread to all parts of the country and many were the "Empire State Express" toys and household articles which appeared on the market. So much attention was attracted by their performance that a number of articles about them appeared in the popular periodicals of the day. While perhaps not absolutely accurate in every technical detail, they do demonstrate the interest and attention which they commanded at the time. As it would take too much time and space to reprint these articles, only mention will be made of them and where they may be found should any reader be sufficiently interested to look them up.

Under date of February 11, 1892, the *Pall Mall Gazette*, a London publication, contained an article, "The Fastest Train in the World," by Mr. T. C. Farrar. This article compares the performance of the Buchanan locomotives on the "Empire State Express", with the most noted English locomotives, very much in favor of the former. He went so far as to recommend the English railways obtaining one of them for unbiased trial over there.

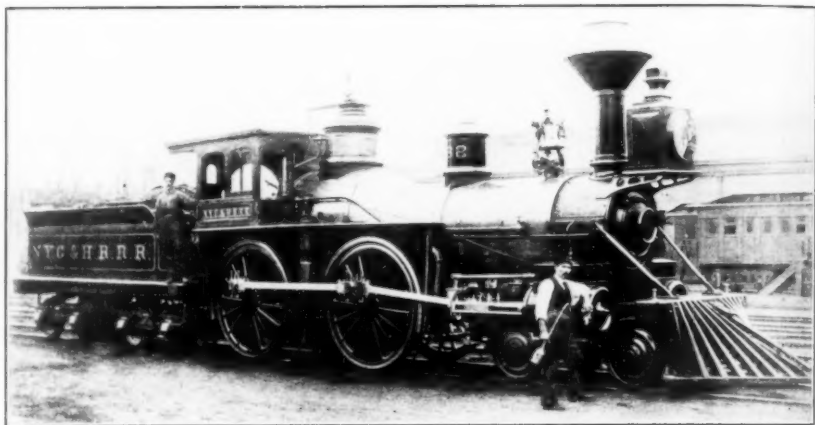
McClure's Magazine, September, 1893, included an article by Mr. Cleveland Moffatt, entitled "At the Throttle". It describes a ride in the cab of the 870, with Engineman Archibald Buchanan, while hauling the "Empire State Express" from New York to Albany. "A Thousand Mile Ride in Twenty Hours on the Engine of a Flier", by Cy Warman, appeared in the January 1894 issue of the same Magazine. This is the story of a ride from New York to Buffalo, on the "Exposition Flier", with engines 898, 907, and 896, and then through to Chicago over the Lake Shore & Michigan Southern Railway. Speeds averaging from 59.5 to 72.69 miles per hour, as having been attained by these locomotives, are recorded in the Railroad Gazette under date of April 7, 1893.

During the World's Columbian Exposition, at Chicago, in 1893, a twenty hour train, called "The Exposition Flier", was operated between New York and Chicago and was handled between New York and



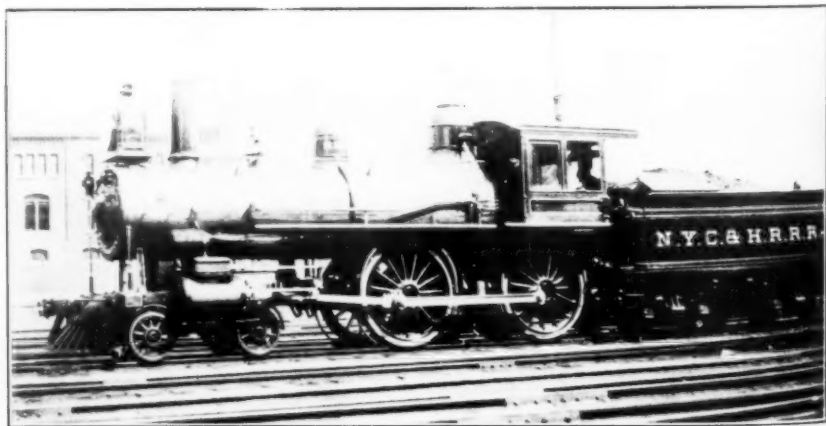
Courtesy of Mrs. Pauline Buchanan Andrews

WILLIAM BUCHANAN
From a Photo Taken at the Time of His Retirement.



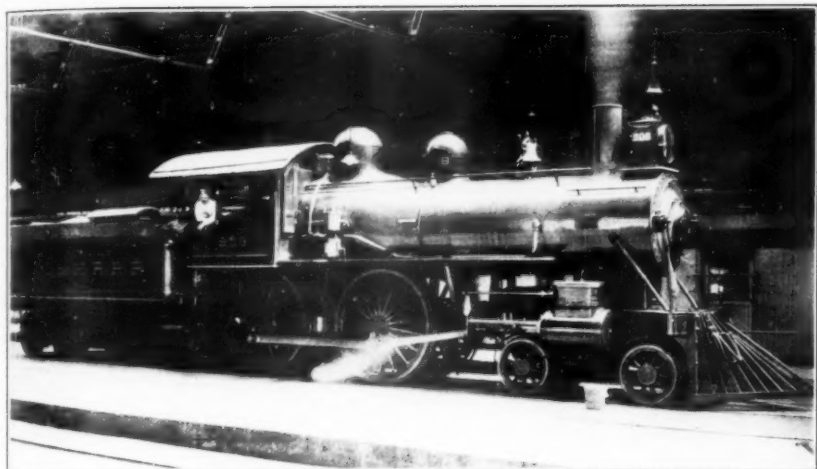
Courtesy of Inglis Stuart

N. Y. C. & H. R. R. R. #82—"Reuben E. Fenton." Taken in the Old Yard of the Grand Central Station About 1873.

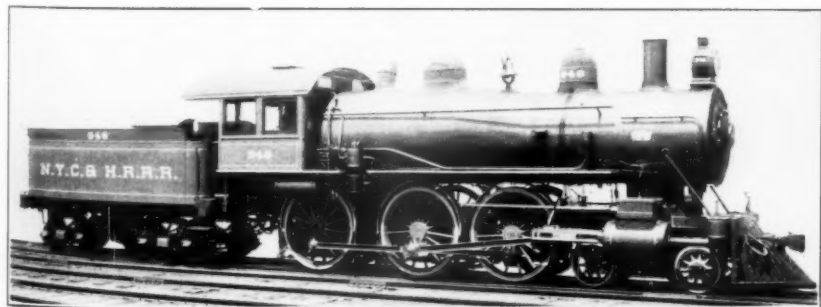


Courtesy of C. B. Burr

N. Y. C. & H. R. R. R. #987—"Rome, N. Y. 1889.



N. Y. C. & H. R. R. R. #908 in the Grand Central Station.



Courtesy of American Locomotive Co.

N. Y. C. & H. R. R. R. #948—Schenectady, 1899



N. Y. C. & H. R. R. R. #936 and Train Which Raced the C. N. E. Train



N. Y. C. #1003, formerly #877. Taken at Elmsford on the Putnam Div., Sept. 1931

Buffalo by Buchanan's 4-4-0 type locomotives. While the time of this train was twenty hours, the combined time of the New York Central train on September 14, 1891, and a Lake Shore train from Chicago to Buffalo on October 24, 1895 (See McClure's for February 1896), was less than fifteen hours for 938 miles the distance between New York and Chicago. As these runs were made with the regular equipment of that day, no spiking of switches, special guards at grade crossings, or modern equipment which is used today, these locomotives demonstrated beyond doubt their ability to haul what were then considered heavy trains at high speed and reflected great credit to their designers and builders.

"On the Fastest Locomotive in the World" was the title of an article in *Harper's Young People*, under date of January 17, 1894. In this article, Albert Franklin Matthews tells of his ride in the cab of the 872, with Engineman John C. Foyle and Fireman John Hugh Tompkins, while pulling the "Exposition Flier" from New York to Albany.

Perhaps No. 999, built at West Albany in April 1893, received the greatest amount of publicity, and it was talked about, written about, and pictured so much that any one who lived in the '90's should have been very familiar with it. As built, the 999 had 19x24 inch cylinders, 86½ inch driving wheels, 180 lbs. boiler pressure, weighed 124,000 lbs., and cost \$13,000. It was finished in the finest and most thorough manner and was indeed "a beautiful piece of work".

It was placed in service on the "Empire State Express" and for a time ran through from New York to Buffalo. It was tried out on the Hudson River Division, but was later assigned to the Western Division. As the return run for Engineman Archibald Buchanan, who was on the "Empire State Express" out of New York, was train No. 18, the "South-western Limited," a heavy train of 366 tons, exclusive of engine and tender, and on some trips as many as eleven cars, Engineman Buchanan is said to have preferred the 870 with 78 inch driving wheels. The 870 is reported to have covered 167,176 miles without shopping while in this service.

While the 999, with its large diameter driving wheels, could not successfully handle the heavy jobs, it could perform great bursts of speed with the "Empire State Express", which at that time was a train of four cars. On May 13, 1893, in charge of Engineman Hogan, who piloted the 862 on the experimental train of September 14, 1891, also the 862 on the first trip of the "Empire State Express", the 999 with the "Empire State Express", covered a mile in 32 seconds, or a rate of 112½ miles per hour. While this record may have been equalled, in one or two instances within the past 42 years, by more highly developed and modern equipment under special conditions, this was a remarkable performance for that day. It was placed on exhibition at the World's Columbian Exposition at Chicago, later that year.

In August 1896, another of these locomotives was built at West Albany Shop, having 78 inch driving wheels, road No. 923, but 70 inch driving wheels were soon substituted. This locomotive is still in service on the Putnam Division. It has been equipped with radial stayed boiler, new cylinders with piston valves, and super-heater. During the month of August 1896, ten more were received from Schenectady, and in

January 1898, ten more. Five of each lot having 78 inch driving wheels and five with 70 inch. The cylinders were 19x24 inches and boiler pressure 180 lbs. but the grate area, heating surface and total weight were increased. The original 870, or that part of it which was not used in the 870 which was turned out of West Albany in November 1898, was equipped with 70 inch driving wheels and assigned road number 944, and later 1038. The 870 as built, or rebuilt, at West Albany in 1898 was a duplicate of the engines built at Schenectady in 1896 and 1898 with 78 inch driving wheels.

The 945 built at West Albany in December 1898, and the 946 at Depew in January 1899, were the last locomotives of this class built, which made a total of seventy-seven, numbered 870 to 946 inclusive. Original numbers 860 to 869 having been renumbered 913 to 922. They were officially designated as class "I", although there were many differences in details, including diameters of driving wheels as previously referred to. In the revised new classification of 1902 they were divided into classes C, Ca, Cb, Cc, and Cd. In 1914 all save the 874 which was demolished in 1912, were renumbered 1000 to 1075. The 999 was class "N", later class C-14 and C-14a.

Six of these locomotives were still listed by the New York Central on January 1, 1935, this number including the 999. All have been equipped with radial stayed boilers and other modern devices so that they no longer resemble the original machines but they are still on the job. The 999 was equipped with 70 inch driving wheels in place of the 86½ inch, assigned to service on the Adirondack Division, later as No. 1086 was on the Pennsylvania Division but has now been painted after the original manner, including its original number 999, and preserved for exhibition purposes only. It has been rebuilt with radial stayed boiler and other alterations which have detracted from its original beauty, if such a word can be applied to a locomotive.

Just prior to Mr. Buchanan's retirement in 1899, he had built at Schenectady Locomotive Works and placed in service on the New York Central, ten 4-6-0 type locomotives with 20x28 inch cylinders, 70 inch driving wheels, 200 lbs. boiler pressure, and weighing 165,500 lbs. total weight of engine. As these were the last passenger locomotives designed by Mr. Buchanan, this paper would not be complete without mention of them and the remarkable performance of one of them, No. 948, which on August 19, 1899, pulled the "Southwestern Limited" consisting of 16 cars, weighing with engine and tender, 918 tons, from New York to Albany in three hours and thirteen minutes or two minutes less than schedule time. The average speed was 44½ miles per hour but it was known to have made as high as 60 miles per hour and was considered a record performance for combined heavy load and high speed. It is interesting to note that five of these locomotives were in service up to about a year ago.

While the cars are heavier today than in Mr. Buchanan's time and the locomotives are much heavier and more powerful, the schedule speed of trains, except perhaps in a very few instances, is no faster, but the locomotive of today can haul no more cars and maintain no better schedules than his locomotives did in their day.

After the 4-4-2's had replaced the 4-4-0's on the Main Line, a number of them were assigned to service on the Harlem Division, where the writer had the good fortune to have seen and ridden on many of them. The 870 as built, or rebuilt at West Albany in 1898, and the 936 came to the Harlem soon after they were built. Although the 870's former popularity made it a favorite with many along the Harlem, the 936 was the writer's favorite and the following incident is recalled. It may be of interest.

Between Mt. Riga and Boston Corners, the Central New England tracks paralleled those of the Harlem and were but a few yards apart. While it is reported that races sometimes took place between the trains of the two roads this was not looked upon with official favor. Out of Millerton on the Harlem, was an up grade, 35 feet per mile in places, a stop had to be made at the Newburg, Dutchess & Connecticut crossing about half a mile north of Millerton station, around curves at Irondale into Mt. Riga, three miles, and with a slight sag the up grade continued another two miles to the highest elevation on the Harlem Division, 776 feet above sea level, then about two miles down grade into Boston Corners, fifty feet below, after crossing the Central New England tracks just south of the station at that place.

One day the writer boarded Harlem train No. 5, consisting of the usual parlor car, combination baggage and smoker, and coach, all twelve wheeled, with locomotive No. 936 at the head end. As we were on time, we pulled out as usual, no apparent effort on the part of 936, stopped at the N. D. & C. junction, and after starting had been slowly picking up speed up the grade, around the curves at Irondale, until we were travelling about 35 miles per hour as we passed Mt. Riga station. At this point a Central New England Express came up on our right and shot by us. It seemed as if the 936 resented being passed for we appeared to leap right after them and in a very short time the rear end of the C. N. E. train was coming back to us and we shot by them, stopped at the junction at Boston Corners, also the station, and left before they showed up. After we crossed the summit which was about half way between the place where the C. N. E. train overtook us and Boston Corners, we travelled!

While on the main line, the 936 was assigned to train No. 19, the "Lake Shore Limited", on the Hudson Division, which often consisted of ten cars, all twelve wheeled equipment. A generator was located in the baggage car to furnish electric lights for the entire train, and this received its supply of steam from the locomotive boiler.

At the time of Mr. Buchanan's retirement in 1899, he had a record of having served as apprentice, machinist, engineman, and official in the mechanical department for fifty-two years, and was continuously in the service of the Hudson River and New York Central & Hudson River Railroads for fifty years. He was married in 1852 to Miss Pauline Jeffers, and their children were Edward George, William Archibald, and Pauline. William and the daughter are still living and to her, Mrs. Pauline Buchanan Andrews, we express our thanks for her cooperation in connection with this paper. Mr. Buchanan passed away on January 25, 1910, at South Norwalk, Connecticut, where he removed after his retirement.

The work of Mr. Buchanan can be summed up in no more appropriate words than the tribute paid him in the April 28, 1899, issue of the *Railroad Gazette*, which states in part:

"By his mechanical talent, his Scotch persistence, and his extraordinary physical and mental power he has made a mark on locomotive practice in the United States such as few men have been able to accomplish.

"He made no revolutions in locomotive practice and he accepted changes cautiously as a man charged with such great financial interests should do; but his administration has been marked by a steady improvement in details until the splendid passenger engines of the New York Central stand among the first of their class.

"Probably the policy of the road as to freight locomotives might wisely have been changed years ago, but it would be difficult to find any locomotives more powerful or more efficient than the latest Moguls put in that service.

"But with all of Mr. Buchanan's Scotch prudence he has been bold enough, and he is among the pioneers in raising the center line of the boiler.

"Mr. Forney said years ago that 'Buchanan can get more out of a ton of coal than any other man in the business'. A statement so sweeping would be hard to maintain and it is possible that Mr. Forney would not try seriously to maintain it now, but it shows the rank taken by Mr. Buchanan in the estimation of high authorities."

April 24, 1935.

Dear Mr. Becker:—

It is a pleasure to furnish you with a print of the "No. 82" for your coming contribution to the Bulletin. I wish that the print could portray the colors of this beautiful locomotive. Its drivers (spokes) were red and when I first saw the engine the hubs were unpainted steel and, inset in black in circular arrangement on the hubs appeared "Dec 1867". The sand box was red with brass top. The jacket around the boiler was splendidly polished and likewise the stack. Mr. James G. Paul, Sr. stands with oil can. I am sorry to have forgotten the fireman's name. The picture was taken soon after 1873. I noticed it in Mr. Paul's parlor and he had a copy made by a Rensselaer photographer and sent it to me and your present print is from my negative of the Rensselaer copy. Relations with Mr. Paul were friendly and quite frequently when in Albany I would cross over the River and make a call. It pleased him when he found that I was wont after school hours to hang over the bridge which spanned the Grand Central tracks and watch "No. 82" start on her run to Albany.

I had a conversation with Mr. Wm. Buchanan when both he and I happened to meet on an Ohio & Mississippi train. He was in company with the Master Mechanist of the London and Northwestern Ry. en route to St. Louis. This was in the autumn of either 1890 or '93 and I recall that he remarked it was his second visit to St. Louis—the first having been in 1849. When an allusion was made to locomotives I told him that I knew the name and number of every locomotive on the Hudson River R. R. "How did you come to learn that?" he asked. I told him that when a small boy I once went over to the 30th Street Station and while prowling entered a brick building where covered with dust were stored the "Kinderhook" and "Dana", the latter a single driver and that tacked on the wall was a Mileage Sheet of 1868—that I copied every engine name and number—the final name being the "Reuben E. Fenton No. 82". Then he began talking about it. The tenor of his remarks showed how highly he esteemed the "Fenton". With a laugh, however, said the "Buchanan" was the one he thought the most of and forthwith he gave his friend a vigorous nudge with his elbow whereat the friend joined in the laughter. From this Englishman I first heard the expression "Boot Leg Stack". So I presume the term is of British origin.

It is my impression that Mr. Buchanan as Master Mechanic of the Hudson River Railroad built the "Union" and "Constitution" which drew the Lincoln Funeral Train. These were wood-burners and I am of the belief that Mrs. Fanny Palmer used one of them as a model in the Currier & Ives lithograph showing an Express Train running along the Hudson. The Engineer looks as if he was a twin brother of William Buchanan! It is needless to say how greatly I enjoyed that chat and regret only that I did not make a memorandum of all the facts related by Mr. Buchanan.

* * * * *

Sincerely yours,

(Signed) INGLIS STUART.

Locomotives of The Boston & Maine Railroad

By CHAS. E. FISHER

FITCHBURG RAILROAD

WE COME now to the last group of locomotives included in the old series of numbers on the Boston & Maine roster—from the Fitchburg R. R.

The Fitchburg R. R. was chartered in the State of Massachusetts on March 3rd, 1842, to build a railroad from Fitchburg to West Cambridge, a distance of 44 miles. In 1846 the road leased the Charlestown Branch R. R., built from Charlestown to West Cambridge, a distance of 5 miles and thus secured an entrance to the vicinity of Boston. The road was opened to Fitchburg on March 5th, 1845, but it was not until August 9th, 1848, that the Fitchburg R. R. Station on Causeway Street was opened for passenger traffic.

At first the management was content with either building or acquiring small roads in eastern Massachusetts. On January 1, 1874, the Fitchburg R. R. leased the Fitchburg to Greenfield portion of the Vermont & Massachusetts R. R., a distance of 56 miles. In 1887, the Fitchburg R. R. acquired the control of the Troy & Greenfield and Troy & Boston Railroads. Through the former they secured control of the famous Hoosac Tunnel and the latter road gave them an entrance to Troy, New York. A few months later, the Fitchburg R. R. secured control of the Boston, Hoosac Tunnel & Western R. R. and this gave them an entrance to Rotterdam Jet., N. Y. Entrance to Meehanieville, N. Y. was secured by control of the Hoosac Tunnel & Saratoga R. R., opened on July 1, 1882. The Fitchburg R. R. thus became one of the most important railroads connecting Boston with the roads in New York State for points in the mid-west and it was not until July 1, 1900, that the road was leased to the Boston & Maine R. R.

Turning to the Annual Reports of the Fitchburg R. R., we find a roster of their locomotives in the Annual Report for the year 1850. Unfortunately the name of the builder and the date of construction is lacking, but this information has been supplied from the Hinkley records and from other sources.

FITCHBURG RAILROAD—1850

Vermont	Hinkley & Drury	1844	4-4-0	13½x20"	60"	33000
Keene	Hinkley & Drury	1844	4-4-0	13½x20"	60"	33000
Brattleboro	Hinkley & Drury	1844	4-4-0	13½x20"	60"	33000
Lexington	Hinkley & Drury	1844	?			33000
Alvah Crocker	Hinkley & Drury	1845	4-4-0	15x20"	54"	40000
Waltham	Hinkley & Drury	1845	4-4-0	15x20"	54"	40000
Tudor	Hinkley & Drury	1842	4-2-0	10½x20"	60"	24000
Bunker Hill	Norris—Phila.	184—	4-2-0	10x18"	48"	19000
William Penn	Hinkley & Drury	1847	4-2-0	11x—"	54"	20000
Gardner	Hinkley & Drury	1847	4-4-0	14x18"	60"	34000
Athol	Hinkley & Drury	1847	4-4-0	16x20"	54"	40000

Leominster	Hinkley & Drury	1847	4-4-0	15x18"	60"	40000
Concord	Hinkley & Drury	1847	4-4-0	15x20"	54"	40000
Shirley	Hinkley & Drury	1847	4-4-0	14x18"	60"	34000
Groton	Hinkley & Drury	1848	4-4-0	15x18"	60"	40000
Lincoln	Hinkley & Drury	1848	4-4-0	16x20"	54"	46000
Cambridge	Hinkley & Drury	1848	4-4-0	15x18"	60"	40000
Littleton	Hinkley & Drury	1848	4-4-0	15x18"	60"	40000
Boston	John Souther	1848	4-4-0	16x20"	66"	46000
Massachusetts	Lowell M. S.	1848	4-4-0	15½x18"	66"	49780
Ontario	Hinkley & Drury	1848	4-6-0	16x20"	46"	47000
Fitchburg	Hinkley & Drury	1848	4-4-0	16x20"	54"	46000
Champlain	Hinkley & Drury	1848	4-6-0	16x20"	46"	47000
Charlestown	Hinkley & Drury	1848	4-4-0	16x20"	54"	46000
Anthracite	Hinkley & Drury	1849	4-4-0	16x20"	54"	44000

The large number of engines purchased in 1848 was due to the expected traffic which would come over the Rutland & Burlington R. R. A period of dull times soon followed and subsequent reports of the Fitchburg R. R. contain many interesting remarks about these locomotives.

In addition to the above roster, the Hinkley records indicate they built two additional engines:

Charlestown	Hinkley & Drury	1843	4-4-0	11½x20"	63"	
Fitchburg	Hinkley & Drury	1843	4-4-0	11½x20"	63"	

In 1845, the Fitchburg R. R. acquired from the Fresh Pond Ice Co., the following locomotives: "Aetna", "Bunker Hill", "Wm. Penn" and "Tudor". The Hinkley records indicate the following engines were built for the Charlestown Branch R. R.:

Tudor	Hinkley & Drury	1842	4-2-0	10½x20"	60"	
Aetna	Hinkley & Drury	1844	4-4-0	12x20"	48"	

In 1849 we find that the "Charlestown" of 1843; the "Fitchburg" of 1843 and the "Aetna" of 1844 were sold. The "William Penn" was the engine of the same name on the Boston & Worcester R. R., Baldwin, 1836, rebuilt by Hinkley & Drury in 1847 and sold to the Charlestown Branch R. R. The "Lexington" left the Hinkley Works under the name "Burlington".

The "Littleton" and "Lexington" were rebuilt in 1855. The "Tudor" was rebuilt the same year and was subsequently sold to the Nashua, Aetna & Boston R. R. The "Anthracite" was changed to a wood burning locomotive in 1851 at a cost of \$2000.00. The Hinkley records indicate that they rebuilt the "Massachusetts" in 1852.

Turning now to Mr. Yeaton's list, this is probably the most intricate list in the Boston & Maine series. From the original numbers carried in 1890, the Fitchburg R. R. renumbered all their locomotives in 1895, renumbered them again in 1899, and in 1900, the Boston & Maine numbers were applied. The rosters of the subsidiary roads of the Fitchburg R. R. will be deferred until our next BULLETIN. Only such locomotives as were carried through to the Boston & Maine numbering will be shown here. Since we are considering these locomotives from the Boston &

Maine standpoint, the arrangement of numbers will be according to their series. The three numbers on the first line will indicate the three sets of numbers on the Fitchburg R. R., provided the locomotive carried three numbers, and will be placed in the order of their renumbering. Names were removed from Fitchburg R. R. locomotives in 1870 and by 1900, the Boston & Maine had discontinued naming their locomotives also.

108-79	Watatic	Mason	# 520	10-29-73	4-4-0	12x22"	
						Rebuilt & renamed	
77-100	Boston	Fitchburg R. R.				Inspection engine	
900	Burned at the	fire at Mechanicsville, N. Y.				Scrapped, 1901	
901		Schenectady	—	1902	4-4-2	19x28" Re 3204	
44-91-101	Brattleboro	Hinkley	—	1869	4-4-0	16x24" V & M #10	
901					4-4-0	Scrap. B. & M. 1901	
901		Schenectady	—	1902	4-4-2	19x28" Re 3205	
52-95-102		Hinkley	—	1874	4-4-0	16x24" Scrap B&M	
902		Schenectady	—	1884	4-4-0	17x24" Re 711	
45-92-103	Turners Falls	Hinkley	—	1869	4-4-0	16x24" V & M #2	
903					4-4-0	Scrap. B & M 1900	
903		Manchester	—	1900	4-4-0	18x24" Re VV 25	
903		Manchester	—	1903	2-6-0	19x26" Re 1372	
31-85-104	Marlboro	McKay & Aldus	—	1867	4-4-0	16x24"	
	Rebuilt	Fitchburg R. R.		1882	4-4-0		
904					4-4-0	Scrap. B & M 1901	
904		Schenectady	# 25078	1902	4-4-2	19x28" Re 3206	
48-83-105	New London	Hinkley	—	1867	4-4-0	16x24" V & M #12	
	Rebuilt	Fitchburg R. R.		1889			
905					4-4-0	Renumbered 605	
32-93-106	Troy	Mason	# 305	3-11-69	4-4-0	16x24"	
	Rebuilt	Fitchburg R. R.		1884	4-4-0		
906					4-4-0	Scrap. B & M 1900	
33-89-107	Wachusett	Hinkley	—	1869	4-4-0	16x24"	
	Rebuilt	Fitchburg R. R.		1884	4-4-0		
907					4-4-0	Scrap. B & M 1904	
907		Manchester	—	1905	2-6-0	19x26" Re 1403	
29-82-108	Hudson	McKay & Aldus	—	1866	4-4-0	16x24"	
	Rebuilt	Fitchburg R R		1886	4-4-0		
908					4-4-0	Scrap. B & M 1900	
908		Manchester	—	1900	4-4-0	18x24" Re SC 2	
908		Manchester	—	1903	2-6-0	19x26" Re 1373	
59-97-109		Fitchburg R R	—	1877	4-4-0	16x24"	
	Rebuilt	Fitchburg R R		1889	4-4-0		
909					4-4-0	Scrap. B & M 1904	
909		Manchester	—	1905	2-6-0	19x26" Re 1404	
50-90-110	Athol	Hinkley	—	1869	4-4-0	16x22"	
	Rebuilt	Fitchburg R R		1890	4-4-0	16x24"	
910					4-4-0	Scrap. B & M 1909	
910		Manchester	—	1910	0-6-0	19x24" Re 307	
62-98-111		Fitchburg R R		1870	4-4-0	16x24"	
	Rebuilt	Fitchburg R R		1891	4-4-0		
911					4-4-0	Scrap. B & M 1908	
911		Manchester	—	1909	0-6-0	19x24" Re 289	
99-112		Fitchburg R R		1892	4-4-0	16x24"	
912					4-4-0	Scrap. B & M 1910	
143-49-113	Lyman Wilder	Schenectady	# 1071	1877	4-4-0	17x24" T & B #16	
913					4-4-0	Scrap. B & M 1903	
913		Schenectady	—	1904	4-6-0	20x26" Re 2108	
60-43-114		Mason	# 573	1-18-77	4-4-0	17x24"	
914					4-4-0	Scrap. B & M 1904	
914		Manchester	—	1905	2-6-0	19x26" Re 1405	

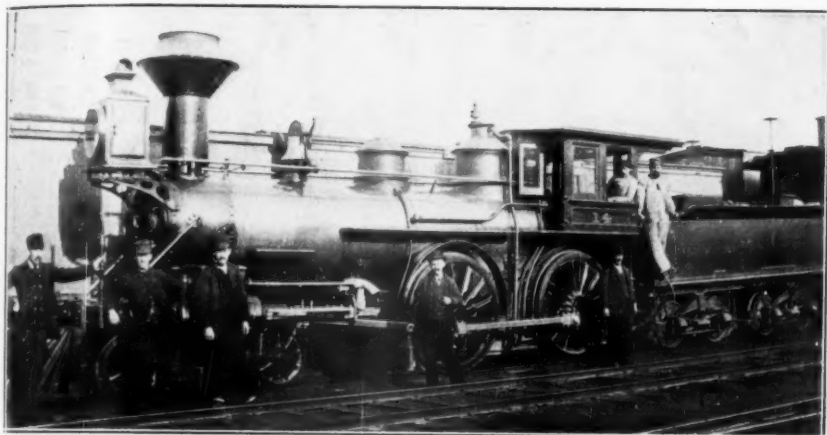
b65- 45-115	Mason	# 587	7-10-77	4-4-0	17x24"
915				4-4-0	Scrap, B & M 1903
915	Manchester	—	1904	4-4-0	18x24" Re 979
144- 50-116	J.H.Williard	# 1072	1877	4-4-0	17x24" T & B #17
916	Rebuilt		1901	4-4-0	Renumbered 681
147- 53-117	S.B.Sanford	# 1184	1879	4-4-0	17x24" T & B #20
917	Rebuilt		1902	4-4-0	Renumbered 682
82- 39-118	Fitchburg R R		1880	4-4-0	17x24"
918				4-4-0	Scrap, B & M 1906
918	Manchester	—	1907	0-6-0	19x24" Re 260
207- 69-119	Vermont	—	1878	4-4-0	17x24" C R R #7
919				4-4-0	Scrap, B & M 1901
919	Schenectady	—	1902	4-4-2	19x28" Re 3207
148- 54-120	Wm. Kemp	# 1841	1883	4-4-0	17x24" T & B #21
920				4-4-0	Scrap, B & M 1904
920	Schenectady	—	1905	2-8-0	20x30" Re 2360
13- 36-121	Fitchburg R R		1877	4-4-0	17x24"
921				4-4-0	Scrap, B & M 1903
921	Manchester	—	1904	0-6-0	19x24" Re 215
152- 57-122	Rogers	# 2891	1882	4-4-0	17x24" BHT&W #13
922				4-4-0	Scrap, B & M 1907
922	Manchester	—	1908	0-6-0	19x24" Re 274
153- 58-123	Rogers	# 2895	1882	4-4-0	17x24" BHT&W #15
923				4-4-0	Scrap, B & M 1905
923	Schenectady	—	1906	2-8-0	20x30" Re 2377
154- 59-124	Rogers	# 3175	1883	4-4-0	17x24" BHT&W #16
924				4-4-0	Scrap, B & M 1906
924	Manchester	—	1907	0-6-0	19x24" Re 261
155- 60-125	Rogers	# 3312	1883	4-4-0	17x24" BHT&W #17
925				4-4-0	Scrap, B & M 1906
925	Manchester	—	1907	0-6-0	19x24" Re 262
156- 61-126	Rogers	# 3345	1883	4-4-0	17x24" BHT&W #18
926				4-4-0	Scrap, B & M 1908
926	Manchester	—	1909	4-4-0	18x24" Re 1006
157- 62-127	Rogers	# 3364	1883	4-4-0	17x24" BHT&W #19
927				4-4-0	Renumbered 709
158- 63-128	Rogers	# 3404	1883	4-4-0	17x24" BHT&W #20
928				4-4-0	Scrap, B & M 1909
928	Manchester	—	1910	0-6-0	19x24" Re 299
35- 35-129	Fitchburg R R		1870	4-4-0	17x24"
	Rebuilt		1890		
929				4-4-0	Scrap, B & M 1910
141- 55-130	D.Robinson	# 1942	1883	4-4-0	17x24" T & B #14
930				4-4-0	Scrap, B & M 1908
930	Schenectady	—	1909	2-6-0	19x26" Re 1476
159- 64-131	Brooks	# 943	1883	4-4-0	17x24" BHT&W #21
931				4-4-0	Scrap, B & M 1903
931	Manchester	—	1904	0-6-0	19x24" Re 216
160- 65-132	Brooks	# 944	1883	4-4-0	17x24" BHT&W #22
932				4-4-0	Scrap, B & M 1907
932	Manchester	—	1908	0-6-0	19x24" Re 275
161- 66-133	Brooks	# 985	1884	4-4-0	17x24" BHT&W #14
933				4-4-0	Scrap, B & M 1904
933	Schenectady	—	1905	2-8-0	20x30" Re 2361
162- 67-134	Brooks	# 963	1884	4-4-0	17x24" BHT&W #1
934				4-4-0	Scrap, B & M 1903
934	Schenectady	—	1904	4-6-0	20x26" Re 2109
209- 71-135	Keene	—	1880	4-4-0	17x24" C R R #9
935				4-4-0	Scrap, B & M 1904
935	Schenectady	# 38003	1905	2-8-0	20x30" Re 2362
18- 37-136	Fitchburg R R		1878	4-4-0	17x24"
	Rebuilt		1896	4-4-0	
936				4-4-0	Renumbered 611

1903	149- 56-137	Taunton	# 694	2-17-79	4-4-0	17x24" BHT&W #8
#17	Rebuilt	Fitchburg R R		1891	4-4-0	
81	937			4-4-0		Scrap, B & M 1908
#20	937	Manchester	—	1909	4-4-0	18x24" Re 1007
82	55- 41-138	Fitchburg R R		1883	4-4-0	18x24"
906	Rebuilt	Fitchburg R R		1891	4-4-0	
#7	938			4-4-0		Scrap, B & M 1908
1901	938	Manchester	—	1910	2-6-0	19x26" Re 1480
7	53- 42-139	Fitchburg R R		1891	4-4-0	17x24"
#21	939			4-4-0		Scrap, B & M 1907
904	939	Manchester	—	1908	0-6-0	19x24" Re 276
	97- 47-140	Mason	# 658	8-31-81	4-4-0	17x24"
	Rebuilt	Fitchburg R R		1897	4-4-0	
	940			4-4-0		Renumbered 602
	99- 16-141	Mason	# 664	10-31-81	4-4-0	18x24"
903	941			4-4-0		Scrap, B & M 1905
V #13	125- 18-142	Manchester	—	1906	2-6-0	19x26" Re 1429
007	942	Hinkley	# 1676	1887	4-4-0	18x24"
V #15	126- 19-143	Hinkley	# 1677	1887	4-4-0	18x24"
006	943			4-4-0		Renumbered 823
V #16	943	Manchester	—	1910	2-6-0	19x26" Re 1481
006	127- 20-144	Hinkley	# 1678	1887	4-4-0	18x24"
V #17	944			4-4-0		Renumbered 824
008	183- 21-145	Taunton	# 972	6-12-88	4-4-0	18x24"
V #18	945			4-4-0		Renumbered 825
009	184- 22-146	Taunton	# 973	6-20-88	4-4-0	18x24"
V #19	946			4-4-0		Renumbered 826
009	185- 23-147	Taunton	# 974	6-29-88	4-4-0	18x24"
V #20	947			4-4-0		Renumbered 826
009	186- 24-148	Taunton	# 975	7-11-88	4-4-0	18x24"
	948			4-4-0		Renumbered 828
	6- 12-149	Manchester	# 1224	1885	4-4-0	18x24"
	949			4-4-0		Renumbered 806
	? 7-150	Fitchburg R R		1885	4-4-0	18x24"
	950			4-4-0		Renumbered 805
	98- 15-151	Mason	# 663	10-31-81	4-4-0	18x24"
	Rebuilt	Fitchburg R R		1897	4-4-0	
	951			4-4-0		Renumbered 663
	216- 25-152	R.M. Pulsifer	# 1404	1883	4-4-0	18x24" C R R #16
	952	Rhode Island		4-4-0		Scrap, B & M 1909
	952	Manchester	—	1910	2-6-0	19x24" Re 1482
	54- 26-153	Fitchburg R R		1891	4-4-0	18x24"
	953			4-4-0		Renumbered 806
	20- 14-154	Manchester	# 1226	1885	4-4-0	18x24"
	Rebuilt	Manchester		1897	4-4-0	
	954			4-4-0		Renumbered 811
	100- 17-155	Mason	# 665	11-7-81	4-4-0	18x24"
	Rebuilt	Schenectady		1897	4-4-0	
	955			4-4-0		Renumbered 814
	12- 13-156	Manchester	# 1225	1885	4-4-0	18x24"
	Rebuilt	Manchester		1898	4-4-0	
	956			4-4-0		Renumbered 812
	7- 10-157	Manchester	# 1193	1884	4-4-0	18x24"
	Rebuilt	Manchester		1896	4-4-0	
	957			4-4-0		Renumbered 810
	158	Rhode Island	# 3090	1899	4-4-0	18x24"
	958			4-4-0		Renumbered 838
	159	Rhode Island	# 3091	1899	4-4-0	18x24"
	959			4-4-0		Renumbered 839

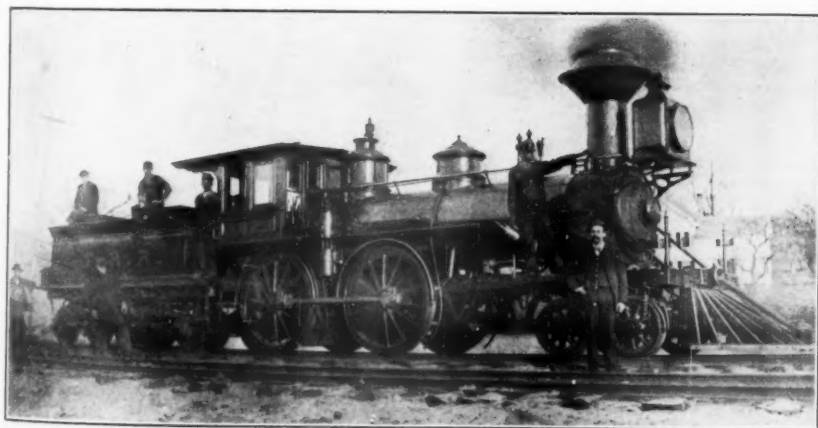
8- 11-160	Rebuilt	Manchester	#1144	1884 4-4-0	18x24"
960		Fitchburg R R		1899 4-4-0	
46- 27-161	Rebuilt	Hinkley	—	4-4-0	Renumbered 813
961		Schenectady		1869 4-4-0	15x22"
28-162		Manchester	#1701	1897 4-4-0	18x24"
962				4-4-0	Renumbered 815
29-163		Manchester	#1702	1899 4-4-0	18x24"
963				4-4-0	Renumbered 940
30-164		Manchester	#1703	1899 4-4-0	18x24"
964				4-4-0	Renumbered 941
31-165		Manchester	#1704	1899 4-4-0	18x24"
965				4-4-0	Renumbered 942
166		Manchester	#1720	1900 4-4-0	18x24"
966				4-4-0	Renumbered 943
167		Manchester	#1721	1900 4-4-0	18x24"
967				4-4-0	Renumbered 944
168		Manchester	#1722	1900 4-4-0	18x24"
968				4-4-0	Renumbered 945
169		Manchester	#1723	1900 4-4-0	18x24"
969				4-4-0	Renumbered 946
170		Manchester	#1724	1900 4-4-0	18x24"
970				4-4-0	Renumbered 947
171		Manchester	#1725	1900 4-4-0	18x24"
971				4-4-0	Renumbered 948
972		Schenectady	—	1902 4-4-2	19x28" Re 3208
973		Schenectady	—	1902 4-4-2	19x28" Re 3209
974		Manchester	—	1903 2-6-0	19x26" Re 1374
66-200-200	Rebuilt	Hinkley	—	1877 2-6-0	18x24"
975		Manchester		1905 2-6-0	Renumbered 1315
71-205 201		Hinkley	—	1878 2-6-0	18x24"
976				2-6-0	Scrap, B & M 1904
72-206-202		Schenectady	—	1905 2-8-0	20x30" Re 2363
977		Hinkley	—	1879 2-6-0	18x24"
977				2-6-0	Scrap, B & M 1904
74-208-203		Schenectady	—	1905 2-8-0	20x30" Re 2364
978		Hinkley	—	1879 2-6-0	18x24"
85-210-204				2-6-0	Scrap, B & M 1903
978		Manchester	—	1904 0-6-0	19x24" Re 217
979		Hinkley	—	1881 2-6-0	18x24"
979				2-6-0	Scrap, B & M 1907
86-211-205		Manchester	—	1908 0-6-0	19x24" Re 277
980		Hinkley	—	1881 2-6-0	18x24"
980				2-6-0	Scrap, B & M 1906
166-217-206		Manchester	—	1907 0-6-0	19x24" Re 263
981		Brooks	#1057	1886 2-6-0	18x24" BHT&W #3
67-201-207	Rebuilt	Hinkley	—	1877 2-6-0	18x24"
982		Fitchburg R R		1895 2-6-0	
982				2-6-0	Scrap, B & M 1907
68-202-208		Manchester	—	1908 0-6-0	19x24" Re 278
983	Rebuilt	Hinkley	—	1878 2-6-0	18x24"
73-207-209		Fitchburg R R		1890 2-6-0	
984				2-6-0	Renumbered 1307
193-223-210	Rebuilt	Hinkley	—	1879 2-6-0	18x24"
985		Fitchburg R R		1890 2-6-0	
194-224-211				2-6-0	Renumbered 1308
986		Rhode Island	#2276	1889 2-6-0	18x24"
986				4-4-0	Renumbered 1309
		Rhode Island	#2277	1889 2-6-0	18x24"
				2-6-0	Scrap, B & M 1907
		Manchester	—	1908 0-6-0	19x24" Re 279

195-225-212 987	Rhode Island	# 2278	1889	2-6-0	18x24"
196-226-213 988	Rhode Island	# 2279	1889	2-6-0	Scrap, B & M 1910
988				2-6-0	18x24"
197-227-214 989	Schenectady	—	1909	2-6-0	Scrap, B & M 1908
198-228-215 990	Rhode Island	# 2280	1889	2-6-0	19x26" Re 1477
990				2-6-0	18x24"
165-216-216	Rhode Island	# 2281	1889	2-6-0	Renumbered 1319
				2-6-0	18x24"
	Schenectady	—	1909	2-6-0	Scrap, B & M 1908
	Brooks	# 1146	1884	2-6-0	19x26" Re 1478
	Fitchburg R R		1897	2-6-0	18x24" BHT&W # 2
991	Rebuilt			2-6-0	Renumbered 1311
119-218-217 992	Taunton	# 933	3-21-87	2-6-0	18x24"
120-219-218 993	Taunton	# 934	3-28-87	2-6-0	Renumbered 1302
121-220-219 994	Taunton	# 935	4-19-87	2-6-0	18x24"
122-221-220 995	Taunton	# 936	4-25-87	2-6-0	Renumbered 1303
123-222-221 996	Taunton	# 937	4-30-87	2-6-0	18x24"
163-214-222	Dickson	# 295		2-6-0	Renumbered 1304
	Fitchburg R R		1881	2-6-0	18x24"
997	Rebuilt		1892	2-6-0	Renumbered 1305
997				2-6-0	18x24"
164-215-223	Manchester	—	1910	2-6-0	Scrap, B & M 1909
	Dickson	# 296	1881	2-6-0	19x26" Re 1483
	Fitchburg R R		1893	2-6-0	18x24"
998	Rebuilt			2-6-0	Renumbered 1310
168-191-224 999	Baldwin	# 8414	1887	2-6-0	19x24" BHT&W # 23
167-190-225 1000	Baldwin	# 8416	1887	2-6-0	Scrap, B & M 1910
234-192-226 1001	Rhode Island	# 2138	1889	2-6-0	19x24" BHT&W # 24
235-193-227 1002	Rhode Island	# 2139	1889	2-6-0	Renumbered 1320
245-150-228 1003	Schenectady	# 3962	1893	2-6-0	19x24" C R R # 34
246-151-229 1004	Schenectady	# 3963	1893	2-6-0	Renumbered 1321
247-152-230 1005	Schenectady	# 3964	1893	2-6-0	19x24" C R R # 35
248-153-231 1006	Schenectady	# 3965	1893	2-6-0	Renumbered 1322
249-154-232 1007	Schenectady	# 3966	1893	2-6-0	19x26"
255-155-233 1008	Schenectady	# 4259	1895	2-6-0	Renumbered 1323
256-156-234 1009	Schenectady	# 4260	1895	2-6-0	19x26"
257-157-235 1010	Schenectady	# 4261	1895	2-6-0	Renumbered 1324
258-158-236 1011	Schenectady	# 4262	1895	2-6-0	Renumbered 1325
259-159-237 1012	Schenectady	# 4263	1895	2-6-0	19x26"
160-238 1013	Schenectady	# 4316	1895	2-6-0	Renumbered 1326
161-239 1014	Schenectady	# 4317	1895	2-6-0	Renumbered 1327
				2-6-0	19x26"
				2-6-0	Renumbered 1328
				2-6-0	19x26"
				2-6-0	Renumbered 1329
				2-6-0	19x26"
				2-6-0	Renumbered 1330
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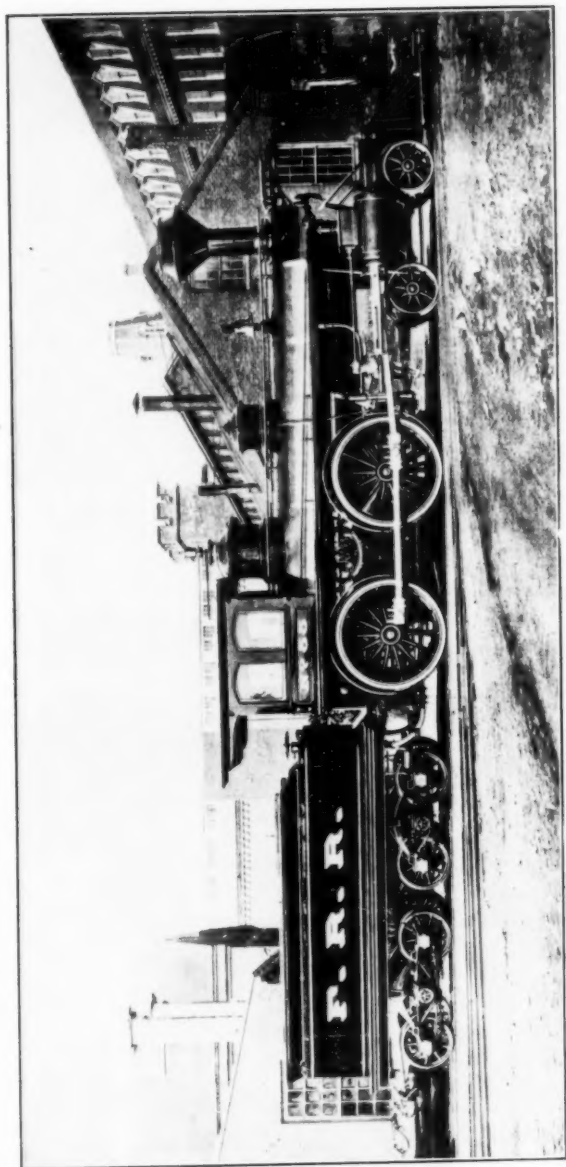
162-240	Schenectady	#4318	1895 2-6-0	19x26"
1015			2-6-0	Renumbered 1335
163-241	Schenectady	#4388	1895 2-6-0	19x26"
1016			2-6-0	Renumbered 1336
164-242	Schenectady	#4389	1895 2-6-0	19x26"
1017			2-6-0	Renumbered 1337
165-243	Schenectady	#4390	1895 2-6-0	19x26"
1018			2-6-0	Renumbered 1338
166-244	Schenectady	#4391	1895 2-6-0	19x26"
1019			2-6-0	Renumbered 1339
167-245	Schenectady	#4392	1895 2-6-0	19x26"
1020			2-6-0	Renumbered 1340
168-246	Schenectady	#4403	1895 2-6-0	19x26"
1021			2-6-0	Renumbered 1341
169-247	Schenectady	#4404	1895 2-6-0	19x26"
1022			2-6-0	Renumbered 1342
170-248	Schenectady	#4405	1895 2-6-0	19x26"
1023			2-6-0	Renumbered 1343
171-249	Schenectady	#4406	1895 2-6-0	19x26"
1024			2-6-0	Renumbered 1344
172-250	Schenectady	#4407	1895 2-6-0	19x26"
1025			2-6-0	Renumbered 1345
173-251	Schenectady	#4432	1896 2-6-0	19x26"
1026			2-6-0	Renumbered 1346
174-252	Schenectady	#4433	1896 2-6-0	19x26"
1027			2-6-0	Renumbered 1347
175-253	Schenectady	#4434	1896 2-6-0	19x26"
1028			2-6-0	Renumbered 1348
176-254	Schenectady	#4435	1896 2-6-0	19x26"
1029			2-6-0	Renumbered 1349
177-255	Schenectady	#4436	1896 2-6-0	19x26"
1030			2-6-0	Renumbered 1350
250-130-256	Rhode Island	#2873	1893 2-6-0	20x24"
1031 Rebuilt	B & M R R		1907 2-6-0	Renumbered 1351
251-131-257	Rhode Island	#2874	1893 2-6-0	20x24"
1032 Rebuilt	B & M R R		1909 2-6-0	Renumbered 1352
252-132-258	Rhode Island	#2875	1893 2-6-0	20x24"
1033 Rebuilt	B & M R R		1908 2-6-0	Renumbered 1353
253-133-259	Rhode Island	#2876	1893 2-6-0	20x24"
1034 Rebuilt	B & M R R		1908 2-6-0	Renumbered 1354
254-134-260	Rhode Island	#2877	1893 2-6-0	20x24"
1035 Rebuilt	B & M R R		1908 2-6-0	Renumbered 1355
135-261	Schenectady	#4544	1897 2-6-0	21 & 32x26"
1036 Rebuilt to	19x26"		2-6-0	Renumbered 1356
136-262	Schenectady	#4667	1898 2-6-0	21 & 32x26"
1037 Rebuilt to	19x26"		2-6-0	Renumbered 1357
137-263	Schenectady	#4668	1898 2-6-0	21 & 32x26"
1038 Rebuilt to	19x26"		2-6-0	Renumbered 1358
138-264	Schenectady	#4669	1898 2-6-0	21 & 32x26"
1039 Rebuilt to	19x26"		2-6-0	Renumbered 1359
236-261-300	Rhode Island	#2326	1890 4-6-0	18x24" CRR #36
1040			4-6-0	Renumbered 1929
237-262-301	Rhode Island	#2327	1890 4-6-0	18x24" CRR #37
1041			4-6-0	Renumbered 1930
199-257-302	Schenectady	#3383	1891 4-6-0	19x24"
1042			4-6-0	Renumbered 1980
200-258-303	Schenectady	#3384	1891 4-6-0	19x24"
1043			4-6-0	Renumbered 1981
238-259-304	Schenectady	#3385	1891 4-6-0	19x24"
1044			4-6-0	Renumbered 1982
239-260-305	Schenectady	#3386	1891 4-6-0	19x24"
1045			4-6-0	Renumbered 1983



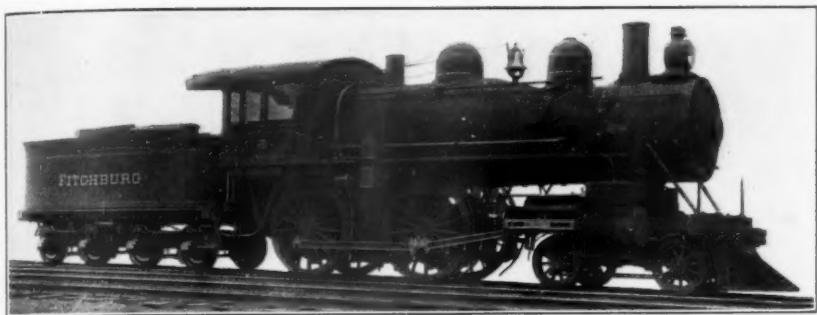
Fitchburg R. R. #14. Fitchburg R. R. 1874.



Fitchburg R. R. #23. Hinkley & Drury 1854, Rebuilt 1871.

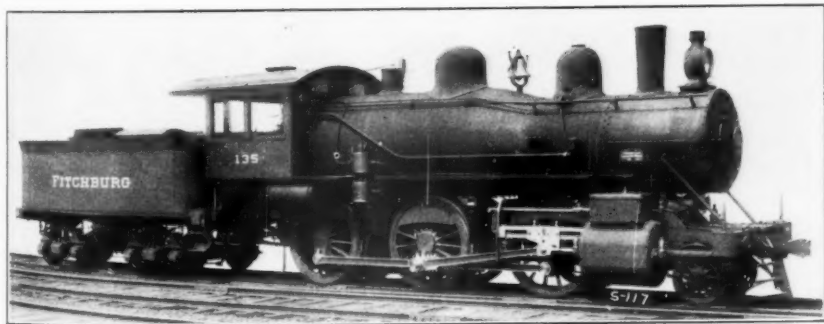


Fitchburg R. R. #55. Mason, 1877



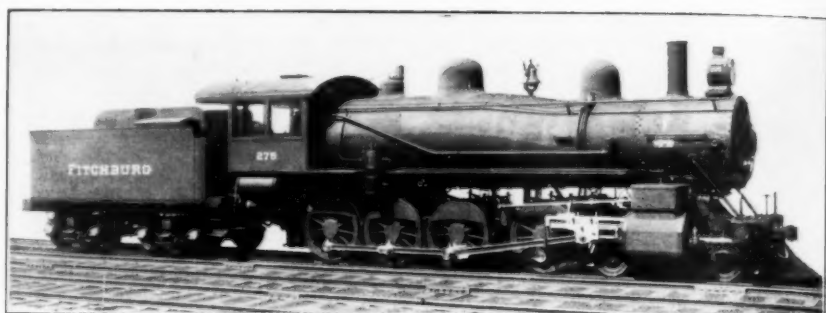
Courtesy of American Locomotive Co.

Fitchburg R. R. #2—Schenectady 1895



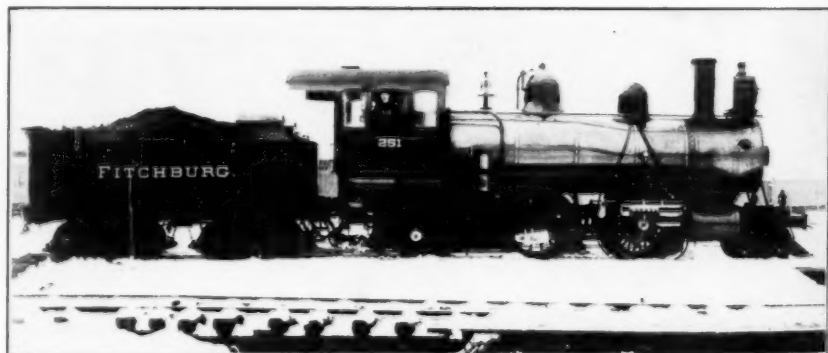
Courtesy of American Locomotive Co.

Fitchburg R. R. #135—Schenectady 1897



Courtesy of American Locomotive Co.

Fitchburg R. R. #275—Schenectady 1899



Courtesy of Ry. & Loco. Historical Society

Fitchburg R. R. #251—Rhode Island 1893

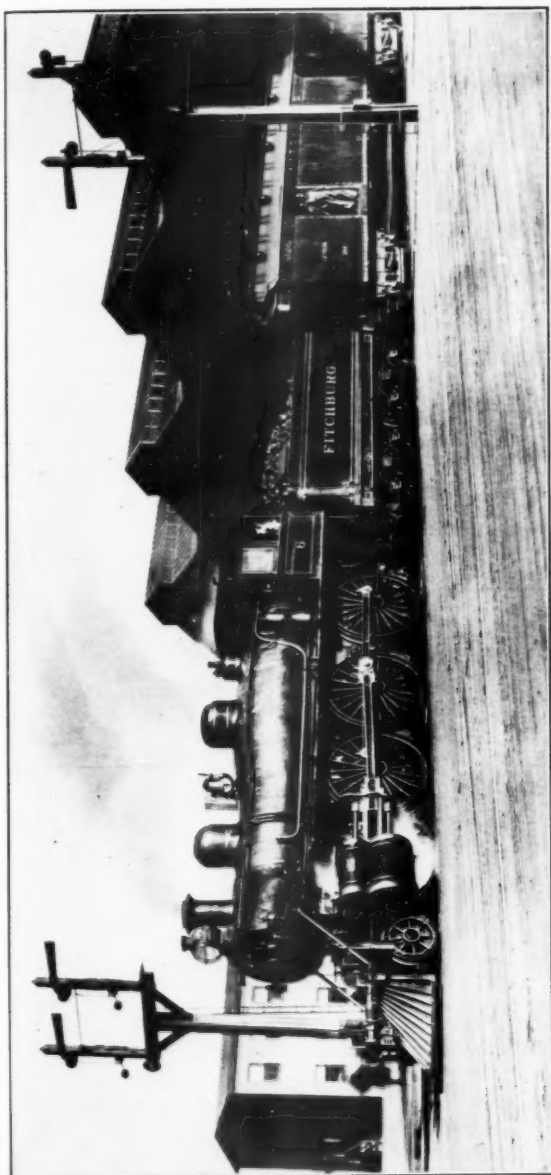
210-250-306	Mass.	Rhode Island	# 915	1880 4-6-0	19x26" CRR #10
1046		Manchester	—	4-6-0	Scrap. B & M 1905
232-251-307	W. A. Russell	Rhode Island	#1005	1906 0-6-0	19x24" Re 247
1047				1881 4-6-0	19x26" CRR #32
1047		Manchester	—	4-6-0	Scrap. B & M 1909
233-252-308	E. C. Thayer	Rhode Island	#1006	1910 2-6-0	19x26" Re 1484
1048	Rebuilt	B & M R R		1881 4-6-0	19x26" CRR #33
212-253-309	J. W. Dodge	Rhode Island	#1194	1903 4-6-0	Renumbered 1915
1049				1882 4-6-0	19x26" CRR #12
208-254-310	F. H. Kingsbury	Rhode Island	#1395	4-6-0	Renumbered 1936
1050				1883 4-6-0	19x26" CRR #8
204-255-311	R. Hyland	Rhode Island	#1650	4-6-0	Renumbered 1937
1051				1886 4-6-0	19x26" CRR #4
202-256-312	W. H. Hill Jr.	Rhode Island	#1766	4-6-0	Renumbered 1938
1052				1887 4-6-0	19x26" CRR #2
5-313		Baldwin	#16112	4-6-0	Renumbered 1939
1053	Rebuilt	B & M R R		1898 4-6-0	21x26"
6-314		Baldwin	#16111	4-6-0	19x26" Re 2074
1054	Rebuilt	B & M R R		1898 4-6-0	15 & 25x26"
7-315		Schenectady	#5011	4-6-0	19x26" Re 2075
1055				1899 4-6-0	20x26"
8-316		Schenectady	#5012	4-6-0	Renumbered 2070
1056				1899 4-6-0	20x26"
1057*		Baldwin	#17926	4-6-0	Renumbered 2071
1058*		Baldwin	#17927	1900 4-6-0	20x26" Re 2076
1059*		Baldwin	#17928	1900 4-6-0	20x26" Re 2077
1060*		Baldwin	#17929	1900 4-6-0	20x26" Re 2078
	* Ordered by Fitchburg R. R., delivered to B & M as numbered.				1900 4-6-0 20x26" Re 2079
1061		Manchester	—	1903 2-6-0	19x26" Re 1375
116-116-401		Taunton	# 943	7-20-87 2-8-0	20x24"
1062				2-8-0	Renumbered 2300
118-118-402		Taunton	# 945	8-8-87 2-8-0	20x24"
1063				2-8-0	Scrap. B & M 1905
1063		Manchester	—	1906 2-6-0	19x26" Re 1430
188-104-403		Rhode Island	#2271	1889 2-8-0	20x24"
1064				2-8-0	Scrap. B & M 1904
1064		Schenectady	—	1905 2-8-0	20x30" Re 2365
189-105-404		Rhode Island	#2272	1889 2-8-0	20x24"
1065				2-8-0	Scrap. B & M 1905
1065		Manchester	—	1906 0-6-0	19x24" Re 248
190-106-405		Rhode Island	#2273	1889 2-8-0	20x24"
1066				2-8-0	Scrap. B & M 1904
1066		Manchester	—	1905 2-6-0	19x26" Re 1406
191-107-406		Rhode Island	#2274	1889 2-8-0	20x24"
1067	Rebuilt	B & M R R		1904 2-8-0	Renumbered 1301
109-109-407		Rhode Island	#1643	1886 2-8-0	20x24"
1068	Rebuilt	B & M R R		1901 2-8-0	Renumbered 2362
112-112-408		Rhode Island	#1646	1886 2-8-0	20x24"
1069				2-8-0	Scrap. B & M 1902
1069		Manchester	—	1903 2-6-0	19x26" Re 1376
187-103		Rhode Island	#2270	1889 2-8-0	20x24"
103-409	Rebuilt	Baldwin	#16299	1898 2-8-0	15 & 25x24"
1070	Rebuilt	B & M R R		1905 2-8-0	20x24" Re 2303
192-108		Rhode Island	#2275	1889 2-8-0	20x24"
108-410	Rebuilt	Baldwin	#16296	1898 2-8-0	15 & 25x24"
1071	Rebuilt	B & M R R		1905 2-8-0	20x24" Re 2304

110-110		Rhode Island	#1644	1886	2-8-0	20x24"
110-411	Rebuilt	Baldwin	#16300	1898	2-8-0	15 & 25x24"
1072	Rebuilt	B & M R R		1905	2-8-0	20x24" Re 2305
111-111		Rhode Island	#1645	1886	2-8-0	20x24"
111-412	Rebuilt	Baldwin	#16297	1898	2-8-0	15 & 25x24"
1073	Rebuilt	B & M R R		1905	2-8-0	20x24" Re 2306
114-114		Taunton	# 941	6-30-87	2-8-0	20x24"
114-413	Rebuilt	Baldwin	#16298	1898	2-8-0	15 & 25x24"
1074	Rebuilt	B & M R R		1905	2-8-0	20x24" Re 2307
117-117		Taunton	# 944	7-28-87	2-8-0	20x24"
117-414	Rebuilt	Baldwin	#16301	1898	2-8-0	15 & 25x24"
1075	Rebuilt	B & M R R		1905	2-8-0	20x24" Re 2308
270-500		Schenectady	#5013	1899	4-8-0	22 & 34x28"
1076	Rebuilt	B & M R R		1899	4-8-0	20x28" Re 2900
271-501		Schenectady	#5014	1899	4-8-0	22 & 34x28"
1077	Rebuilt	B & M R R		1899	4-8-0	20x28" Re 2901
272-502		Schenectady	#5015	1899	4-8-0	22 & 34x28"
1078	Rebuilt	B & M R R		1899	4-8-0	20x28" Re 2902
273-503		Schenectady	#5016	1899	4-8-0	22 & 34x28"
1079	Rebuilt	B & M R R		1899	4-8-0	20x28" Re 2903
274-504		Schenectady	#5017	1899	4-8-0	22 & 34x28"
1080	Rebuilt	B & M R R		1899	4-8-0	20x28" Re 2904
275-505		Schenectady	#5018	1899	4-8-0	22 & 34x28"
1081	Rebuilt	B & M R R		1899	4-8-0	20x28" Re 2905
506		Schenectady	#5255	1899	4-8-0	22 & 34x28"
1082	Rebuilt	B & M R R		1899	4-8-0	20x28" Re 2906
507		Schenectady	#5256	1899	4-8-0	22 & 34x28"
1083	Rebuilt	B & M R R		1899	4-8-0	20x28" Re 2907
508		Schenectady	#5257	1899	4-8-0	22 & 34x28"
1084	Rebuilt	B & M R R		1899	4-8-0	20x28" Re 2908
509		Schenectady	#5258	1899	4-8-0	22 & 34x28"
1085	Rebuilt	B & M R R		1899	4-8-0	20x28" Re 2909
510		Rhode Island	#3193	1900	4-8-0	22 & 34x28"
1086	Rebuilt	B & M R R		1900	4-8-0	20x28" Re 2910
511		Rhode Island	#3194	1900	4-8-0	22 & 34x28"
1087	Rebuilt	B & M R R		1900	4-8-0	20x28" Re 2911
512		Rhode Island	#3195	1900	4-8-0	22 & 34x28"
1088	Rebuilt	B & M R R		1900	4-8-0	20x28" Re 2912
513		Rhode Island	#3196	1900	4-8-0	22 & 34x28"
1089	Rebuilt	B & M R R		1900	4-8-0	20x28" Re 2913
514		Rhode Island	#3197	1900	4-8-0	22 & 34x28"
1090	Rebuilt	B & M R R		1900	4-8-0	20x28" Re 2914
515		Rhode Island	#3198	1900	4-8-0	22 & 34x28"
1091	Rebuilt	B & M R R		1900	4-8-0	20x28" Re 2915
516		Rhode Island	#3199	1900	4-8-0	22 & 34x28"
1092	Rebuilt	B & M R R		1900	4-8-0	20x28" Re 2916
517		Rhode Island	#3200	1900	4-8-0	22 & 34x28"
1093	Rebuilt	B & M R R		1900	4-8-0	20x28" Re 2917
176-357-600		Grant	#1214	1878	0-4-0	10x22"
1094					0-4-0	Scrap, B & M 1902
1094		Manchester	—	1903	2-6-0	19x26" Re 1377
42-354-601		Fitchburg R R		1875	0-4-0	15x22"
1095					0-4-0	Scrap, B & M 1902
1095		Manchester	—	1903	2-6-0	19x26" Re 1378
57-355-602		Fitchburg R R		1876	0-4-0	15x22"
1096					0-4-0	Scrap, B & M 1904
1096		Manchester	—	1903	2-6-0	19x26" Re 1407
139-342-603	Pony	Schenectady	#1122	1879	0-4-0	16x22" T & B #13
1097					0-4-0	Scrap, B & M 1908
1097		Manchester	—	1909	4-4-0	18x24" Re 1008

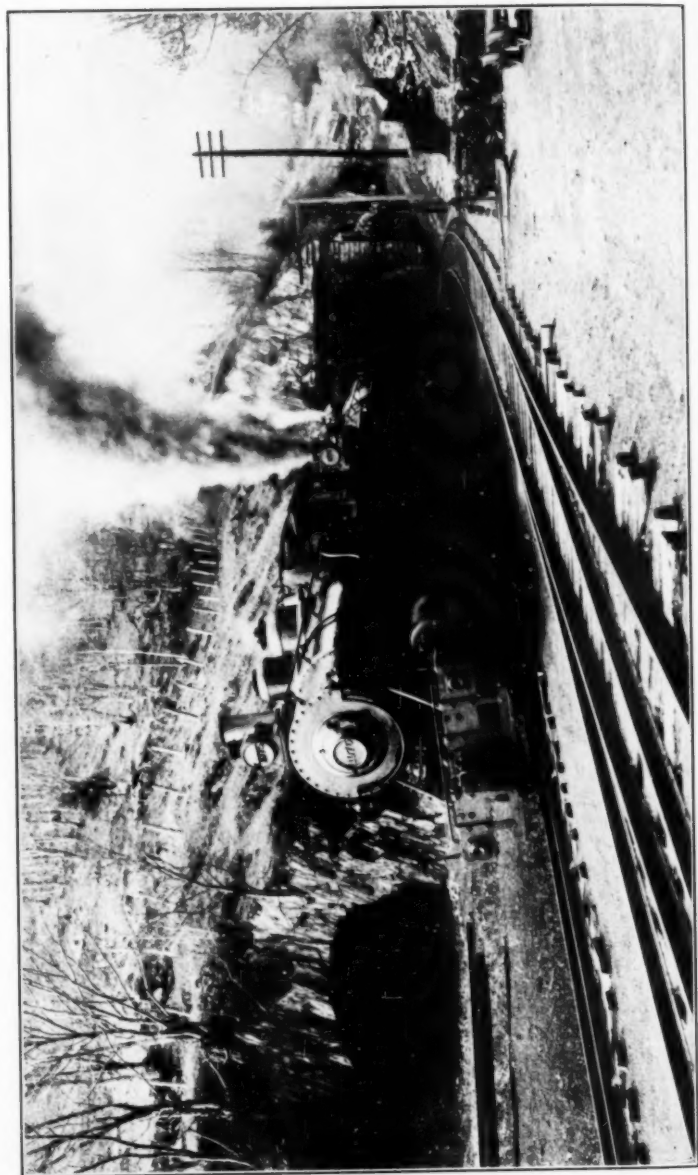
81-345-604	Hinkley	—	1880	0-6-0	16x22"
1098				0-6-0	Scrap, B & M 1908
83-346-605	Schenectady	—	1909	2-6-0	19x26" Re 1479
1099	Hinkley	—	1880	0-6-0	16x22"
1099				0-6-0	Scrap, B & M 1909
84-347-606	Manchester	—	1910	2-6-0	19x26" Re 1485
1100	Hinkley	—	1881	0-6-0	16x22"
1100				0-6-0	Scrap, B & M 1909
89-348-607	Manchester	—	1910	2-6-0	19x26" Re 1486
1101	Hinkley	—	1881	0-6-0	16x22"
11-349-608				0-6-0	Renumbered 100
1102	Fitchburg R R		1884	0-6-0	16x22"
43-344-609				0-6-0	Renumbered 101
	Hinkley	—	1880	0-6-0	16x22"
Rebuilt	Fitchburg R R		1893		
1103				0-6-0	Renumbered 102
172-340-610	Rogers	# 3200	1883	0-4-0	16x24" BHT&W # 50
1104				0-4-0	Scrap, B & M 1909
1104	Manchester	—	1910	0-6-0	19x24" Re 308
173-341-611	Rogers	# 3426	1883	0-4-0	16x24" BHT&W # 51
1105				0-4-0	Scrap, B & M 1903
1105	Manchester	—	1904	2-6-0	19x26" Re 1391
177-327-612	Taunton	# 966	4-5-88	0-6-0	17x24"
1106				0-6-0	Scrap, B & M 1909
1106	Manchester	—	1910	0-6-0	19x24" Re 309
178-328-613	Taunton	# 967	4-17-88	0-6-0	17x24"
1107				0-6-0	Renumbered 110
179-329-614	Taunton	# 968	4-24-88	0-6-0	17x24"
1108				0-6-0	Scrap, B & M 1906
1108	Manchester	—	1907	0-6-0	19x24" Re 264
180-330-615	Taunton	# 969	4-30-88	0-6-0	17x24"
1109				0-6-0	Renumbered 111
181-331-616	Taunton	# 970	5-12-88	0-6-0	17x24"
1110				0-6-0	Scrap, B & M 1909
1110	Manchester	—	1910	2-6-0	19x26" Re 1487
182-332-617	Taunton	# 971	5-19-88	0-6-0	17x24"
1111				0-6-0	Scrap, B & M 1909
1111	Manchester	—	1910	2-6-0	19x26" Re 1488
124-324-618	Taunton	# 938	5-27-87	2-6-0	17x24"
1112				2-6-0	Scrap, B & M 1909
1112	Manchester	—	1910	2-6-0	19x26" Re 1489
240-300-619	Schenectady	# 3461	1891	0-6-0	18x24"
1113				0-6-0	Renumbered 130
241-301-620	Schenectady	# 3462	1891	0-6-0	18x24"
1114				0-6-0	Renumbered 131
242-302-621	Schenectady	# 3463	1891	0-6-0	18x24"
1115				0-6-0	Renumbered 132
243-303-622	Schenectady	# 3464	1891	0-6-0	18x24"
1116				0-6-0	Renumbered 133
244-304-623	Schenectady	# 3465	1891	0-6-0	18x24"
1117				0-6-0	Renumbered 134
77-119-640	Baldwin	# 4782	1879	2-8-0	20x24"
Rebuilt	Fitchburg R R			0-8-0	
1118				0-8-0	Scrap, B & M 1905
1118	Schenectady	—	1906	2-8-0	20x30" Re 2378
78-120-641	Baldwin	# 4780	1879	2-8-0	20x24"
Rebuilt	Fitchburg R R			0-8-0	
1119				0-8-0	Scrap, B & M 1905
1119	Manchester	—	1906	0-6-0	19x24" Re 239
79-121-642	Baldwin	# 4886	1879	2-8-0	20x24"
Rebuilt	Fitchburg R R			0-8-0	
1120				0-8-0	Scrap, B & M 1903
1120	Manchester	—	1904	0-6-0	19x24" Re 218

80-122-643		Baldwin	#4887	1879	2-8-0	20x24"
	Rebuilt	Fitchburg R R			0-8-0	
	1121				0-8-0	Scrap, B & M 1905
	1121	Schenectady	—	1906	4-6-0	20x26" Re 2125
90-123-644		Baldwin	#5512	1881	2-8-0	20x24"
	Rebuilt	Fitchburg R R			0-8-0	
	1122				0-8-0	Scrap, B & M 1905
	1122	Manchester	—	1906	0-6-0	19x24" Re 249
91-124-645		Baldwin	#5513	1881	2-8-0	20x24"
	Rebuilt	Fitchburg R R			0-8-0	
	1123				0-8-0	Scrap, B & M 1905
	1123	Schenectady	—	1906	4-6-0	20x26" Re 2126
92-125-646		Baldwin	#5814	1881	2-8-0	20x24"
	Rebuilt	Fitchburg R R			0-8-0	
	1124				0-8-0	Scrap, B & M 1905
	1124	Schenectady	—	1906	2-8-0	20x30" Re 2379
93-126-647		Baldwin	#5819	1881	2-8-0	20x24"
	Rebuilt	Fitchburg R R			0-8-0	
	1125				0-8-0	Scrap, B & M 1903
	1125	Manchester	—	1904	0-6-0	19x24" Re 219
94-127-648		Baldwin	#5838	1881	2-8-0	20x24"
	Rebuilt	Fitchburg R R			0-8-0	
	1126				0-8-0	Scrap, B & M 1905
	1126	Schenectady	—	1906	4-6-0	20x26" Re 2129
95-128-649		Baldwin	#5844	1881	2-8-0	20x24"
	Rebuilt	Fitchburg R R			0-8-0	
	1127				0-8-0	Scrap, B & M 1910
115-400-650		Taunton	# 942	7-11-87	2-8-0	20x24"
	Rebuilt	Fitchburg R R			0-8-0	
	1128				0-8-0	Scrap, B & M 1908
	1128	Manchester	—	1909	4-4-0	18x24" Re 1009
	3-700	Schenectady	#4502	1896	4-4-0	19x24"
	1129	B & M R R		1908	4-4-0	Renumbered 1163
	4-701	Schenectady	#4503	1896	4-4-0	19x24"
	1130	B & M R R		1907	4-4-0	Renumbered 1164
	1-702	Schenectady	#4319	1895	4-4-0	19x24"
	1131	B & M R R		1905	4-4-0	Renumbered 1161
	2-703	Schenectady	#4320	1895	4-4-0	19x24"
	1132	B & M R R		1905	4-4-0	Renumbered 1162
	704	Schenectady	#5549	1900	4-4-0	19x26"
	1133				4-4-0	Renumbered 1165
	705	Schenectady	#5550	1900	4-4-0	19x26"
	1134				4-4-0	Renumbered 1166
	706	Schenectady	#5551	1900	4-4-0	19x26"
	1135				4-4-0	Renumbered 1167
	707	Schenectady	#5552	1900	4-4-0	19x26"
	1136				4-4-0	Renumbered 1168

As may be readily supposed there were engines on the Fitchburg roster which never carried a Boston & Maine number and which would not appear in the above list. With the exception of the subsidiary roads whose rosters will appear in a subsequent BULLETIN and such locomotives on the list of 1850 which appeared at the beginning of this article that never carried Fitchburg numbers, these engines are listed in the order of their numerical assignment, prior to 1895 and such numbers that these engines carried after 1895, so far as we know, are indicated.



Fitchburg R. R. #6—Baldwin 1898



B. & M. R. R. #1075—Taunton L. W. 1887, Rebuilt Baldwin 1898, Emerging from Eastern Portal of Hoonah Tunnel. Note Old Bore on the Left.

1	Vermont	Hinkley & Drury	# 23	6-25-44	4-4-0	13½x20"
						Scrap, F R R
1		Baldwin	#6147	1882	0-4-0	16x22" Dummy
2	Keene	Hinkley & Drury	# 25	9-16-44	4-4-0	13½x20"
3	A. Crocker	Hinkley & Drury	# 45	7-24-45	4-4-0	15x20"
3		Rhode Island	# 347	1871	2-6-0	17x24"
4	Waltham	Hinkley & Drury	# 50	8-30-45	4-4-0	15x20"
4-351		Hinkley	—	1871	0-4-0	15x22"
5	Tudor	Hinkley & Drury	# 12	12-26-42	4-2-0	10½x20"
	Rebuilt	Fitchburg R R	1855	Sold to Nashua,		Acton & Boston R R
5		Fitchburg R R		1874	0-4-0	15x22"
6	Gardner	Hinkley & Drury	# 95	3-30-47	4-4-0	14x18"
7	Leominster	Hinkley & Drury	# 113	8- 2-47	4-4-0	15x18"
8	Lincoln	Hinkley & Drury	# 164	4-22-48	4-4-0	16x20"
9	Shirley	Hinkley & Drury	# 139	12-22-47	4-4-0	14x18"
	Rebuilt	Fitchburg R R		1872	4-4-0	
10	Groton	Hinkley & Drury	# 154	3- 6-48	4-4-0	15x18"
11	Cambridge	Hinkley & Drury	# 161	4-11-48	4-4-0	15x18"
12	Littleton	Hinkley & Drury	# 169	5-10-48	4-4-0	15x18"
13	Boston	John Souther	—	1848	4-4-0	16x20"
14	Massachusetts	Lowell M. S.	—	1848	4-4-0	15½x18"
	Rebuilt	Hinkley	# 374	6- 7-52	4-4-0	15x20"
15- 40	Champlain	Hinkley & Drury	# 208	11- 7-48	4-6-0	16x20"
16	Fitchburg	Hinkley & Drury	# 212	11-11-48	4-4-0	16x20"
17	Charlestown	Hinkley & Drury	# 215	12- 8-48	4-4-0	16x20"
18	Anthracite	Hinkley & Drury	# 232	4- 6-49	4-4-0	16x20"
19	Bunker Hill	Hinkley & Drury	# 263	6-10-50	4-6-0	16x20"
	Rebuilt	Fitchburg R R		1877	4-4-0	16x24"
20	Union	Hinkley & Drury	#321	8- 8-51	4-4-0	16x20"
21	J. Forster	Hinkley & Drury	#437	4-16-53	4-4-0	15x20"
22	Onward	Hinkley & Drury	#467	8-19-53	4-4-0	15x20"
23	S. M. Felton	Hinkley & Drury	#506	2-25-54	4-4-0	16x20"
	Rebuilt	Fitchburg R R		1871	4-4-0	
24	Hoosac	Mason	#133	5-29-63	4-4-0	15x24"
	Rebuilt	Fitchburg R R		1869		
25	Acton	Mason	#134	6- 8-63	4-4-0	15x24"
						Exploded, 1864
	Rebuilt	Mason	#156	3-31-64	4-4-0	15x24"
	Rebuilt	Fitchburg R R		1877	4-4-0	
26- 80	Assabet	Hinkley	#733	1865	4-4-0	16x24"
	Rebuilt	Fitchburg R R		1878		
27- 81	Greenfield	Hinkley	#734	1865	4-4-0	16x24"
	Rebuilt	Fitchburg R R		1880		
28	Belmont	Hinkley	#779	1866	4-4-0	16x22"
	Rebuilt	Fitchburg R R		1878		
30	Lincoln	McKay & Aldus	—	1867	0-4-0	14x22"
	Rebuilt	Fitchburg R R		1875	0-4-0	
36		Fitchburg R R		1870	4-4-0	17x24"
37		Fitchburg R R		1872	4-4-0	15x22"
38		Fitchburg R R		1872	4-4-0	17x22"
39		Fitchburg R R		1873	0-4-0	14x22"
40-356		Fitchburg R R		1873	0-4-0	14x22"
41-353		Fitchburg R R		1874	0-4-0	15x22"
56-241		Rhode Island	#682	1876	2-6-0	17x24"
58		Rhode Island	#685	1876	2-6-0	17x24"
b61- 44		Mason	#575	2- 5-77	4-4-0	17x24"
62-242		Rhode Island	#695	1877	2-6-0	17x24"
63-243		Rhode Island	#696	1877	2-6-0	17x24"
64- 96		Hinkley	—	1877	4-4-0	16x24"
69		Hinkley	—	1878	2-6-0	18x24"
70-204		Hinkley	—	1878	2-6-0	18x24"
75		Hinkley	—	1879	2-6-0	18x24"

b76	Fitchburg R R	1879 4-4-0	17x24"
87-212	Hinkley	1881 2-6-0	18x24"
88-213	Hinkley	1881 2-6-0	18x24"
96	Mason	#657 8-23-81	4-4-0 17x24"
113-113	Rhode Island	#1647 1886	2-8-0 20x24"

b—This engine at one time carried the bell on the front bumper rung by a rod attached to the eccentric strap.

The majority of the above engines were scrapped by the Fitchburg R. R. Some must have been renumbered but the records are incomplete.

We come now to the last groups of locomotives received by the Boston & Maine R. R., before the present system of numbering was inaugurated in 1911.

1137	Baldwin	#17948	1900	4-4-0	19x26"	Renumbered	1170
1138	Baldwin	#17949	1900	4-4-0	19x26"	Renumbered	1171
1139	Baldwin	#18077	1900	4-4-0	19x26"	Renumbered	1172
1140	Baldwin	#18125	1900	4-4-0	19x26"	Renumbered	1173
1141	Schenectady		1901	2-8-0	20x30"		
	Rebuilt B & M R R		1909		20x30"	Renumbered	2310
1142	Schenectady		1901	2-8-0	20x30"	Renumbered	2311
1143	Schenectady		1901	2-8-0	20x30"	Renumbered	2312
1144	Schenectady		1901	2-8-0	20x30"	Renumbered	2313
1145	Schenectady		1901	2-8-0	20x30"	Renumbered	2314
1146	Schenectady		1901	2-8-0	20x30"	Renumbered	2315
1147	Schenectady		1901	2-8-0	20x30"	Renumbered	2316
1148	Schenectady		1901	2-8-0	20x30"	Renumbered	2317
1149	Schenectady		1901	2-8-0	20x30"	Renumbered	2318
1150	Schenectady		1901	2-8-0	20x30"	Renumbered	2319
1151	Schenectady		1901	2-8-0	20x30"	Renumbered	2320
1152	Schenectady		1901	2-8-0	20x30"	Renumbered	2321
1153	Schenectady		1901	2-8-0	20x30"	Renumbered	2322
1154	Schenectady		1901	2-8-0	20x30"	Renumbered	2323
1155	Schenectady		1901	2-8-0	20x30"	Renumbered	2324
1156	Schenectady		1901	2-8-0	20x30"	Renumbered	2325
1157	Schenectady		1901	2-8-0	20x30"	Renumbered	2326
1158	Schenectady		1901	2-8-0	20x30"	Renumbered	2327
1159	Schenectady		1901	2-8-0	20x30"	Renumbered	2328
1160	Schenectady		1901	2-8-0	20x30"	Renumbered	2329
1161	Schenectady		1902	2-8-0	22 & 35x32"	Renumbered	2350
1162	Schenectady		1902	2-8-0	20x30"	Renumbered	2330
1163	Schenectady		1902	2-8-0	20x30"	Renumbered	2331
1164	Schenectady		1902	2-8-0	20x30"	Renumbered	2332
1165	Schenectady		1902	2-8-0	20x30"	Renumbered	2333
1166	Schenectady		1902	2-8-0	20x30"	Renumbered	2334
1167	Schenectady		1902	2-8-0	20x30"	Renumbered	2335
1168	Schenectady		1902	2-8-0	20x30"	Renumbered	2336
1169	Schenectady		1902	2-8-0	20x30"	Renumbered	2337
1170	Schenectady		1902	2-8-0	20x30"	Renumbered	2338
1171	Schenectady		1902	2-8-0	20x30"	Renumbered	2339
1172	Schenectady		1902	2-8-0	20x30"	Renumbered	2340
1173	Schenectady		1902	2-8-0	20x30"	Renumbered	2341
1174	Schenectady		1902	2-8-0	20x30"	Renumbered	2342
1175	Schenectady		1902	2-8-0	20x30"	Renumbered	2343
1176	Schenectady		1902	2-8-0	22 & 35x32"	Renumbered	2351
1177	Schenectady		1902	2-8-0	22 & 35x32"	Renumbered	2352
1178	Schenectady		1902	2-8-0	22 & 35x32"	Renumbered	2353
1179	Schenectady		1902	2-8-0	22 & 35x32"	Renumbered	2354
1180	Schenectady		1902	2-8-0	22 & 35x32"	Renumbered	2355

1181	Schenectady	1902	2-8-0	22 & 35x32"	Renumbered	2356
1182	Schenectady	1902	2-8-0	22 & 35x32"	Renumbered	2357
1183	Schenectady	1902	2-8-0	22 & 35x32"	Renumbered	2358
1184	Schenectady	1902	2-8-0	20x32"	Renumbered	2359
1185	Schenectady	1910	2-8-0	20x30"	Renumbered	2400
1186	Schenectady	1910	2-8-0	20x30"	Renumbered	2401
1187	Schenectady	1910	2-8-0	20x30"	Renumbered	2402
1188	Schenectady	1910	2-8-0	20x30"	Renumbered	2403
1189	Schenectady	1910	2-8-0	20x30"	Renumbered	2404
1190	Schenectady	1910	2-8-0	20x30"	Renumbered	2405
1191	Schenectady	1910	2-8-0	20x30"	Renumbered	2406
1192	Schenectady	1910	2-8-0	20x30"	Renumbered	2407
1193	Schenectady	1910	2-8-0	20x30"	Renumbered	2408
1194	Schenectady	1910	2-8-0	20x30"	Renumbered	2409
1195	Schenectady	1910	2-8-0	20x30"	Renumbered	2410
1196	Schenectady	1910	2-8-0	20x30"	Renumbered	2411
1197	Schenectady	1910	2-8-0	20x30"	Renumbered	2412
1198	Schenectady	1910	2-8-0	20x30"	Renumbered	2413
1199	Schenectady	1910	2-8-0	20x30"	Renumbered	2414
1200	Schenectady	1910	2-8-0	20x30"	Renumbered	2415
1201	Schenectady	1910	2-8-0	20x30"	Renumbered	2416
1202	Schenectady	1910	2-8-0	20x30"	Renumbered	2417
1203	Schenectady	1910	2-8-0	20x30"	Renumbered	2418
1204	Schenectady	1910	2-8-0	20x30"	Renumbered	2419
1205	Schenectady	1911	2-8-0	20x30"	Renumbered	2420
1206	Schenectady	1911	2-8-0	20x30"	Renumbered	2421
1207	Schenectady	1911	2-8-0	20x30"	Renumbered	2422
1208	Schenectady	1911	2-8-0	20x30"	Renumbered	2423
1209	Schenectady	1911	2-8-0	20x30"	Renumbered	2424
1210	Schenectady	1911	2-8-0	20x30"	Renumbered	2425
1211	Schenectady	1911	2-8-0	20x30"	Renumbered	2426
1212	Schenectady	1911	2-8-0	20x30"	Renumbered	2427
1213	Schenectady	1911	2-8-0	20x30"	Renumbered	2428
1214	Schenectady	1911	2-8-0	20x30"	Renumbered	2429
1251	Manchester	1911	4-4-0	18x24"	Renumbered	1010
1252	Manchester	1911	4-4-0	18x24"	Renumbered	1011
1253	Manchester	1911	4-4-0	18x24"	Renumbered	1012
1254	Manchester	1911	4-4-0	18x24"	Renumbered	1013
1255	Manchester	1911	4-4-0	18x24"	Renumbered	1014
1256	Manchester	1911	4-4-0	18x24"	Renumbered	1015
1257	Manchester	1911	4-4-0	18x24"	Renumbered	1016
1258	Manchester	1911	4-4-0	18x24"	Renumbered	1017
1259	Manchester	1911	4-4-0	18x24"	Renumbered	1018
1260	Manchester	1911	4-4-0	18x24"	Renumbered	1019
1261	Manchester	1911	4-4-0	18x24"	Renumbered	1020
1262	Manchester	1911	4-4-0	18x24"	Renumbered	1021
1263	Manchester	1911	4-4-0	18x24"	Renumbered	1022
1264	Manchester	1911	4-4-0	18x24"	Renumbered	1023
1265	Manchester	1911	4-4-0	18x24"	Renumbered	1024
1266	Manchester	1911	4-4-0	18x24"	Renumbered	1025
1267	Manchester	1911	4-4-0	18x24"	Renumbered	1026
1268	Manchester	1911	4-4-0	18x24"	Renumbered	1027
1269	Manchester	1911	4-4-0	18x24"	Renumbered	1028
1270	Manchester	1911	4-4-0	18x24"	Renumbered	1029
1291	Schenectady	1910	2-6-6-2	22 & 35x30"	Renumbered	3000
Nos. 1291-1294						
1292	Schenectady	1910	2-6-6-2	22 & 35x30"	Renumbered	3001
1293	Schenectady	1910	2-6-6-2	22 & 35x30"	Renumbered	3002
1294	Schenectady	1910	2-6-6-2	22 & 35x30"	Renumbered	3003
2501	Westinghouse	1910		Electric Motor	Renumbered	5000
2502	Westinghouse	1910		Electric Motor	Renumbered	5001
2503	Westinghouse	1910		Electric Motor	Renumbered	5002

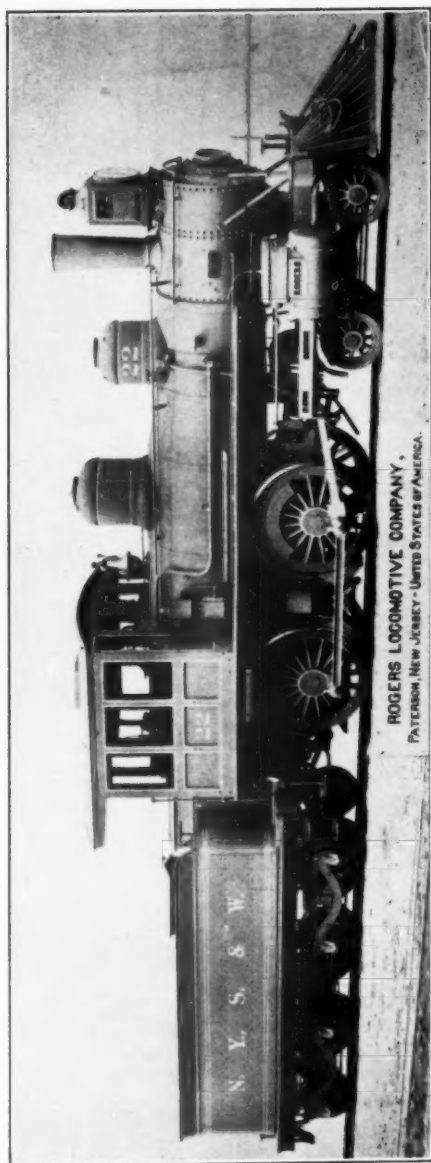
2504	Westinghouse	1910	Electric Motor	Renumbered 5003
2505	Westinghouse	1910	Electric Motor	Renumbered 5004

The concluding article in this series will include the locomotives that came into the Fitchburg R. R. from the subsidiary roads making up that system, some of which are not included in the above roster.

In BULLETIN No. 35, page 68, we made the statement that the Concord R. R. locomotive "Gladiator" was built by Mr. Frank M. Stevens, Master Mechanic of the Concord R. R. Through the kindness of Mr. J. Frank Cook, I am able to correct this statement. Mr. Charles L. Eastman was the Master Mechanic of the Concord Shops at the time this locomotive was constructed. Mr. Stevens was the originator of the ideas upon which the "Gladiator" was constructed but never held any official position on the road. His idea was backed by Mr. John H. Pearson, a Director of the Concord R. R. and Mr. Stevens was instructed to supervise the construction.

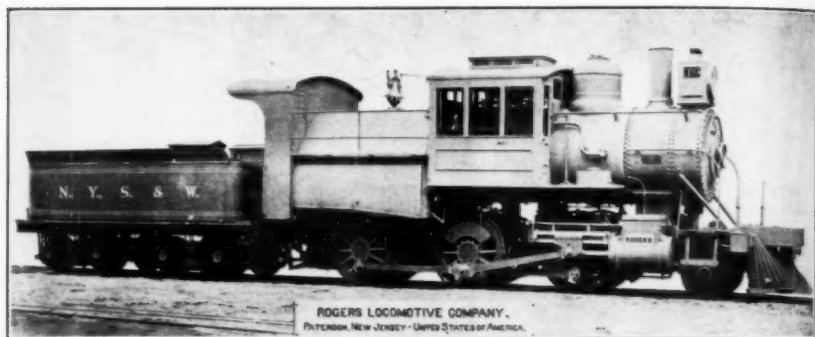
Correction

In BULLETIN No. 36, opposite page 41, appeared a reproduction of the locomotive "San Vicente." Subsequent facts indicate this locomotive was built for the Penoles Mining Co. of Mexico in 1897. While both Mr. Graves and the Editor regret this error appeared in such a fine piece of work as presented by Mr. Graves, the error was due to the prints furnished the author by the builder, since his request was based on illustrations furnished the Colorado Midland and the Manitou & Pike's Peak Railroads.

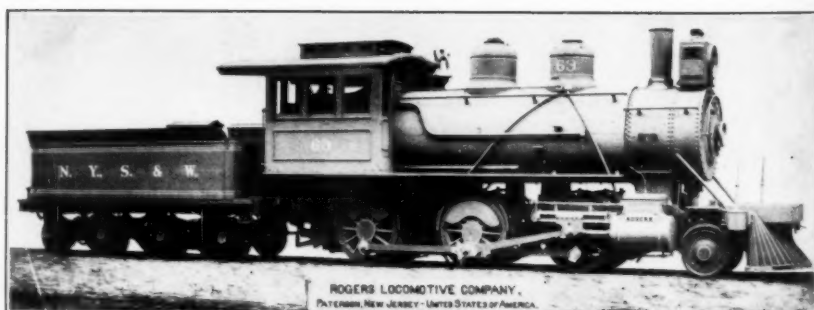


ROGERS LOCOMOTIVE COMPANY.
PATENTED NEW JERSEY - UNITED STATES OF AMERICA.

N. Y. S. & W. #22—Rogers, 1894



N. Y. S. & W. #49—Rogers, 1894



N. Y. S. & W. #63—Rogers, 1894

Yesterdays on The New York, Susquehanna & Western

By ARTHUR CURRAN

IT IS not the purpose of these notes to present an extended history of the N. Y., S. & W., but merely to record the random recollections of an observer who spent much time in and about the various railroad yards around the city of New York at a period which is of interest to many railroad historians.

At the time mentioned—about 35 or 40 years ago—the Susquehanna used the old Pennsylvania Station in Jersey City. This shed, by the way, accommodated the Lehigh Valley and, also, a few trains of the West Shore.

Then, as now, the Susquehanna was a subsidiary of the Erie, and the passenger rolling-stock was painted a dark red like the Erie's cars of those days. Photographs of this old equipment would be interesting now.

Most of the motive power came from Rogers, and conformed to the standard practice of that famous builder. It is of interest to note, however, that some engines were supplied by Rhode Island. It would be equally interesting to know why orders were sent to distant Providence when Paterson was so nearby! Of course, Rogers might have been busy and Rhode Island offered an attractive price. Whatever it was, the Rhode Islands came and ran for many years in the stronghold of Rogers and of Cooke!

Reference to a map will show that the road occupied a strip lying between the Hudson and Susquehanna rivers. Obviously, it was intended as a through route between New York and Wilkes Barre, with a branch to Hanford, N. J.

What actually happened, however, was that the road developed into a suburban line, with most of its passenger traffic east of Stroudsburg.

The tangle of railroads in Northern New Jersey provided the only means of rapid transit prior to the motor age, and included such short lines as the New Jersey & New York, and the New York & Greenwood Lakes, both of which are in the Erie family today.

The nature of the traffic on these lines did not call for anything bigger than the American type for passenger and the Mogul type for freight. This condition lasted for many years, and was not changed until the Erie had to find use for its superannuated power of heavier classes. It is only fair to remark, though, that the 4-4-0 and 2-6-0 engines had served their time; some of them reaching a ripe old age! It cannot be said, therefore, that the old power was rushed into oblivion before being worn out.

With few exceptions, the old N. Y., S. & W. power was so designed that the boiler-head extended right through the cab, doors on each side giving access to places for engineman and fireman. Later on, the road bought a few Mother Hubbard engines, also. One of the latter is shown herewith.

Another Mogul, No. 63, illustrates the conventional design. Cylinders 19x26, drivers 54 inches, weight 127,000 lbs. The boiler was 66 inches in diameter and carried 180 lbs. steam per sq. in. Built in 1894.

Philip T. Nixon was one of the best known passenger engineers on the road. John Schultz was his fireman. Mr. Nixon used to run No. 19, Rogers 4-4-0, and later No. 23, same type. The 23 was named PHILIP T. NIXON. The class is illustrated by No. 22, presented herewith. Built in 1894.

The last engine run by Mr. Nixon—and named for him!—was No. 25, a Rogers 4-6-0, built in 1893.

In the old days, certain grades of anthracite were cheap. A great deal was used on the Susquehanna, as could be guessed from the grayish tinge of the stacks near the top. Carefully fired, the stuff was well enough; but clinkered like blazes if given a chance!

Incidentally, the use of anthracite goes back a great many more years than some suppose. Much was expected of it, but experience has shown that bituminous coal of fairly good grade is a better fuel for locomotives.

The Susquehanna finally went home to the Erie, and the old P. R. R. shed saw it no more. It is of interest today as one of the railroads which *might* have been bigger, *if* circumstances had been a little different. That, by the way, applies to many a good man who has been licked by adverse conditions.

Early Railroad Items



INCE the appearance of this material in our BULLETIN No. 35, some of our members have sent in additional items and we are only too glad to include them in our publication. From Mr. James M. Kimball, we are in receipt of the following:

Great Southern Freight & Passenger Line—Endicott Litho. Shows freight train with wood burning locomotives. 20x34" L. C.

Volunteer Refreshment Saloon. (Phila.)—T. Sinclair Litho. Cars of P. W. & B. R. R. at right. 20x28". L. C.

Hinkley & Drury, 4-2-0 type of locomotive, no cab. Thayer Litho. Jas. Hinkley, Del. 23x28". Dated 1845. L. C.

Baldwin 8-wheel connected—Class E. Hobart Brown, Del. Rosenthal Litho. 18x30". L.

Erie R. R.—Starruca Valley. Depicts a fine autumnal scene showing Starruca Bridge with a train on it. 18x24". L. C.

Currier & Ives—"Railroad Junction". Same as the one listed in BULLETIN No. 35 but without printing. Colored.

Soldier's Rest, Alexandria, Va. Shows three troop trains with wood burners, roundhouse in distance. Chas. Magnus, N. Y. Del. 11x17". L. C.

Harper's Ferry. Shows B. & O. freight train with woodburning engine and hopper coal cars. Sachse Litho. 9x15. L.

New York, Lake Erie & Western R. R. #331, 4-6-0. 6x17". Colored supplement to "Railway & Locomotive Engineering"—1895.

Lake Shore & Michigan Southern R. R.—"The Exposition Flyer" Locomotive #331. 1893. American Fine Arts Litho. 7x13". L. C.

New York Central R. R. "De Witt Clinton" and No. 999. 8x14". Issued as advertising matter by the railroad. L.

Southern Central (N. Y.) R. R. "Owego", 4-4-0, Taunton L. W. 1872. 11½x18½. L. C.

From Mr. Graham Brush comes the following additions:

"West Point Foundry". Mr. Brush states this was either an N. Currier or a Currier & Ives and it depicts the old West Point Foundry at Cold Spring, N. Y. The picture shows the foundry amid trees and in the background is the Hudson River with a train and steamboat in the distance. (West Point Foundry built the "De Witt Clinton" and a few of our earliest engines.)

"A Limited Express"—Currier & Ives caricature.

"Life's Railway to Heaven"—song—respectfully dedicated to the Railway Men, copyright, 1891, by Charles D. Tillman.

Mr. Brush also listed the L. S. & M. S. "Exposition Flyer" as already listed by Mr. Kimball.

From Mr. Robert C. Schmid, the following were received:

Hinkley & Drury Locomotive "Massachusetts." The name is spelled incorrectly—"Massachussets." A copy of this lithograph, with the name spelled correctly, was published in the July 26, 1907 issue of the *Railroad Gazette* and it was stated the locomotive was built for the Philadelphia & Reading R. R. in 1849. Cyl. 15x18", drivers 54". (Evidently this is a different lithograph from the one listed in BULLETIN No. 35.)

Lancaster Locomotive Works—Locomotive "John C. Breckenridge" and tender. This locomotive was built for the Philadelphia & Columbia R. R. in 1857.

Lawrence Machine Shops—Locomotive "Lawrence" and tender. Shop No. 52, 1853. A copy of this lithograph is shown in Bradlee's "History of the Boston & Maine R. R." as having been built for the road. (The records of the Boston & Maine do not indicate a locomotive coming from this builder under the name "Lawrence." The engine might have been renamed.)

✓ Louisville & Chicago R. R.—Locomotive "Traveller"—1860. The full name of the road is Louisville, New Albany & Chicago R. R. as shown by the title on the lithograph.

William Mason—Locomotive "Enterprise." Shows a locomotive of about the same style and type as the "W. G. Armstrong." (The Mason records do not reveal any engine built under this name and this lithograph was doubtless issued for advertising purposes only.)

McKay & Aldus—Locomotive "L. Holbrook." Built for the Chicago & North-Western Ry. in 1867.

Portland Company—Locomotive Shop No. 85, 1854. This is stated that it might be the "Shelburne", delivered to the Grand Trunk in 1856. The lithograph shows an outside connected engine but the Portland records indicate the "Shelburne" was inside connected.

Portland Company—Locomotive "Minnehaha", 1856. This shows Shop No. 103, which was probably the "Minot" built for the Grand Trunk Ry. In 1859, the G. T. R. commenced building locomotives in their own shops and some of them closely resembled the "Minnehaha."

Rogers, Ketchum & Grosvenor—Locomotive "Juno"—1839. A copy of this lithograph was published in the "Railroad Gazette", Jan. 11, 1907, stating this locomotive was built for the Jersey City & New Brunswick R. R.

Schenectady Locomotive Works—Locomotive "Anglo-American." This locomotive was built in 1856 for the Buffalo & Lake Huron R. R.

An additional item of Schenectady—Locomotive "Gov. Marcy", Shop No. 3, 1851, built for the Michigan Southern R. R.

Miscellaneous—Locomotive "Americaine"—This is believed to represent Atlantic & Great Western Ry. No. 16, although the lettering on the tender is imperfect.

Mr. Schmid also gives the additional item:

Virginia Locomotive & Car Mfg. Co.—Locomotive "Virginia", Shop No. 47, 4-4-0 type. No date.

It is a pleasure to record these additional items and corrections to our list in BULLETIN No. 35.

In connection with these items, it may be of interest to our members to learn that the Schwartz Galleries, 507 Madison Ave., New York, N. Y. have on sale the following work of Mr. O. Kuhler. The work of Mr. Kuhler needs no introduction as he has been very kind towards the Society in the matter of cover designs. Those of us who saw his work on exhibition here in Boston and it has been and will be exhibited elsewhere cannot but be impressed with his technique. The following is a list of his titles:

ETCHINGS:	Plate Size
Giants on Call.....	10½x13¼"
Panting Brute.....	13¼x16¾"
Ladies in Waiting.....	13¼x16¾"
Dashing Demon.....	13x16¾"
Fast Mail.....	6x 8"
The Curve.....	Not Given
The Rattler.....	12¾x 7¾"

Set of Iron Horse in the Making:

The Monster Grows.....	9½x13"
Monster and Midgets.....	9½x13"
The First Breath.....	9½x13"
The First Step.....	9½x13"
The Boiler Makers.....	9½x13"

COLOR PRINTS:

De Witt Clinton.....	10½x13"
General.....	10½x13"
Camels.....	10½x13"
Pioneer.....	10½x13"
Stevens-Crampton.....	10½x13"

These are rapidly becoming scarce and those of our members who are interested should write to the Schwartz Galleries for prices.

Brief Sojourns

By ANN ARBOR

IN THE first decade of this present century, Jackson, Michigan, from the point of view of one interested in locomotives, was a place well worth visiting.

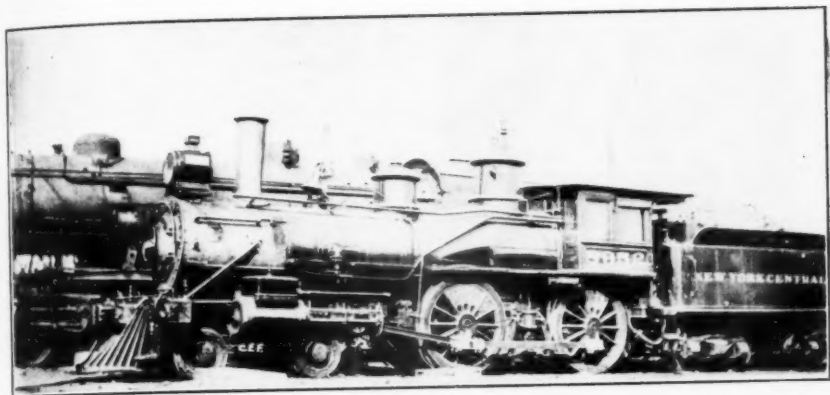
Jackson is located seventy-four miles west of Detroit on the main line of the Michigan Central R. R. In addition to its being a division point, all trains east and west changed locomotives at this point, the road located here its main repair shops for the lines in the United States. It was also an important junction point. Trains from Grand Rapids and Detroit took the main line at Jackson. This point was also the terminal of the old Jackson, Lansing & Saginaw R. R. and here the old Michigan Air Line, between Jackson and Niles also joined the main line.

Southern Michigan, in the eighties, saw much competitive railroad building and the majority of these roads were taken over by either the old Lake Shore & Michigan Southern R. R. or the Michigan Central R. R. The lines extending to Ft. Wayne, Indiana and Toledo, Ohio were controlled by the old Lake Shore and the old Cincinnati Northern R. R. also terminated at this point. Thus, it will be seen, that although Jackson was served in the main by the Michigan Central R. R., there were many branch lines radiating in different directions.

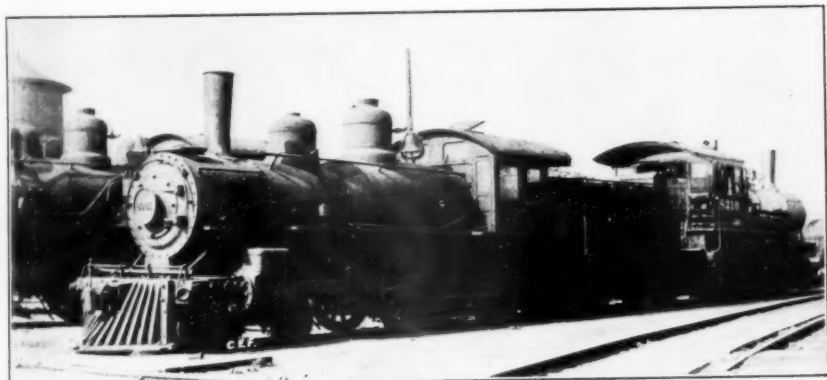
A visit to the shops and engine terminal, under the management of that genial Master Mechanic, Mr. Sherwood, was usually possible by any well mannered individual. They were situated east of the station with the main line and the freight yard in close proximity. A large semi-enclosed roundhouse took care of the needs of the engines coming in from their runs. The shops were situated in the rear, and from the lack of mechanical knowledge on the part of the writer, appeared to be well equipped and well ordered. However, in order to accommodate the "overflow" there was a sort of open air roundhouse between the shops and the main line and here some of the smaller locomotives would be found.

With the increase in the weight of trains, both passenger and freight, former main line locomotives were relegated to branch line work and many of them would be found here at Jackson. The many and various classes of the 4-4-0 and 4-6-0 of the old Lake Shore & Michigan Southern R. R. probably ended their days on some of these branch lines. The little 4-4-0's of the Cincinnati Northern R. R. also carried the passenger trains in and out of this city to their southern terminus.

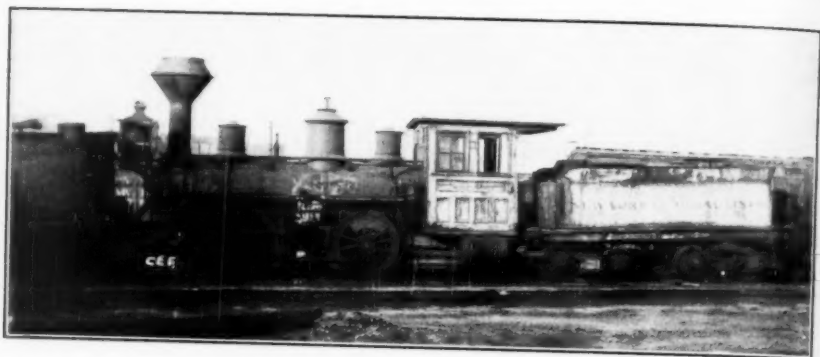
The Michigan Central power presented much of interest to the visitor. Of course the large main line power was much in evidence and since that has already been mentioned in BULLETIN No. 34, it need not be repeated here. On the other hand many of the 4-4-0's built by the road and by the Manchester Works were still in service. There could also be viewed the 2-6-0 and 4-6-0, the latter for freight and passenger service, furnished by the Schenectady Locomotive Works. Many of these



M. C. R. R. #8952—Manchester, 1877



M. C. R. R. #8981—Rebuilt M. C. R. R. 1899



M. C. R. R. #8075—Jackson Shops, 1871



The Line of Old Engines at Jackson, Mich.

were as originally built, for the road used them in main line local freight service and on their branch lines. All came to Jackson for an overhauling.

Possibly the most interesting point to visit was the string of old "cripples" waiting to be scrapped. Here would be found the lighter 4-4-0's built by the road, Hinkley and Manchester, the small 0-4-0 switchers, also built by the road and the small 0-6-0 switchers, built by the road, Grant and Schenectady. Some of the 0-4-0 switchers still retained their diamond stacks and, no doubt saw many years of service in the Detroit yards and elsewhere. What stories these old timers could tell could they have talked! The increase in the price of scrap iron, due to the outbreak of European hostilities brought to an end this interesting old line of engines. Doubtless many others have succeeded them but none will ever carry the charm of that smaller generation of locomotives.

Longer locomotive runs on the main line, unequal competition with the truck and buses have reduced the service on the majority of the branch lines and Jackson, today, presents an entirely different place, so far as the locomotives are concerned, of twenty-five years ago. Had I to do it over again, I would have made copious notes for future reference and tried to have taken some photographs. As it is, I will have to rely on my own memory and trust that your Editor can assist in the matter of photographs. But I can subscribe to this statement, that twenty-five years ago, the Michigan Central R. R. facilities at Jackson, Michigan were well worth a visit to any one interested in the early locomotives of that road.

Notes on Early Railroads

MASSACHUSETTS

RAIL ROAD. Quincy rail road was the first work of the kind in the United States. It is three miles in length, and leads from a quarry of granite to Neponset River, near Boston harbour. Rail roads from Boston to Lowell, and to Worcester, are in progress; several others have been projected.

MASSACHUSETTS

RAIL ROADS. Massachusetts has taken the lead in this kind of improvement, that of Quincy being the first work of the kind in the United States. One is now in progress from Boston to Lowell; another from Boston to Worcester is also commenced. Several others are projected.

NEW JERSEY

CANALS AND RAIL ROADS. New Jersey emulates the enterprise of Pennsylvania and other sister States, in these improvements. Morris canal connects Hudson river at Jersey City, opposite the city of New York, with Delaware river at Phillipsburg, opposite Easton on the Pennsylvania side. The Delaware and Raritan canal, connects the Delaware at Lamberton below Trenton, with the Raritan at New-Brunswick, a distance of 38 miles. It is a noble undertaking, intended for sloop navigation.

Camden and Amboy Rail Road crosses the State diagonally, and extends from Camden on Delaware river opposite Philadelphia, to South Amboy at the mouth of the Raritan river, a distance of 61 miles. Patterson and Hudson River Rail Road when completed, will extend from Patterson on Passaic river, to Jersey City on the Hudson, opposite the city of New York, a distance of 14 miles. Others have been projected.

PENNSYLVANIA

RAIL ROADS AND CANALS. Mauch Chunk was the first rail road constructed in the State. Hawesdale or Lackawana rail road, is 17 miles in length. This, in connection with the Hudson and Delaware canal, forms a line of communication between the city New York and the coal region in the north-east corner of the State.

Union canal connects Schuylkill river at Reading with the Susquehannah. It is 83 miles in length. Schuylkill canal is an improvement of the river navigation from Reading to Philadelphia, 108 miles. The Pennsylvania and Ohio line, from Philadelphia to Pittsburg, 407 miles, partly by rail roads and partly by canals, is in a state of great forwardness. First, a rail road from Philadelphia to Columbia, 85 miles. Thence a canal to the Allegheny mountains; thence a rail road of 40 miles across the mountains; thence a canal to Pittsburg. A branch will extend along the Susquehannah to Dunstown, and another is contemplated along the eastern branch of the river, to the New York line. A canal is also in progress between Pittsburg and Erie on the Lake, 168 miles. Many other improvements of the kind have already been executed, and more are projected by this energetic State. The impulse thus given to agriculture and manufactures is great and continually increasing.

MARYLAND

RAIL ROADS AND CANALS. Maryland is fully awake to the immense advantages she may derive from increased facilities of communication, particularly with the Western States. The Baltimore and Ohio rail road is the greatest enterprise of the kind undertaken in the United States. It commences at the city of Baltimore, and is in successful progress. A number of bridges have been erected on this road; but the most extensive one is that styled the Patterson viaduct, about seven miles from the city. This immense structure is composed of granite. It is 375 feet long, and the width of the road surface is upwards of 28 feet. The two centre arches, as exhibited in the annexed plate, have each a span of about 55 feet, and rise 16 feet above their chords. The small arches at each side of these, are intended for the county roads, which pass through them.

Susquehannah rail road, from Baltimore to Susquehannah river, is also in progress, as is also Chesapeak and Ohio canal, an enterprise of great magnitude, partly in this State, intended to extend from Georgetown on the Potomack, 340 miles to Pittsburg on the Ohio. In its progress it will pass through one of the Allegheny mountains, by a tunnel 4 miles in length.

LOUISIANA

RAIL ROAD. A rail road connects the city New Orleans with lake Ponchartrain, distance in a straight line $4\frac{1}{2}$ miles. This lake is a place of great resort for pleasure parties in the summer months.

ENGLAND

RAIL ROADS. The Liverpool and Manchester rail road is a most stupendous work. It has four sets of tracts, two for passengers, and two for transportation. The distance is 32 miles, and is run, on one of the tracts, in one hour and 30 minutes. Others are in progress.

—From Daniel Adams' *Geography*—Boston, 1832.

Contributed by
H. E. Nichols.

From Atlantic to Pacific

MOST of our readers, probably, have already seen mentioned in the columns of the daily press the wonderful railroad trip recently made across the American continent from New York to San Francisco—a distance of 3316 miles—in 84 hours, a trip which is certainly without parallel in railway annals, and which merits something more than a passing notice. The trip appears to have been organized as a speculation by Messrs. Jarrett and Palmer, the theatrical managers of New York, these gentlemen issuing tickets at the price (including a return journey to New York by the ordinary trains) at 500 dols. each. The number of passengers was at first announced to be limited to sixteen, but the run was actually made by a party of twenty-five, these including three actors who had been advertised to appear in San Francisco on June 4th. The train consisted of a baggage car, a smoking and “commissary” ear, and the Pullman hotel car “Marlborough”, the baggage and smoking ears belonging to the Pennsylvania Railroad Company, and having been constructed at the Altoona works.

The first step in the journey was the ferry of one mile from New York to Jersey City, at which latter place the railway trip began at 12.53 A. M. on June 1st. The first company to deal with the train was the Pennsylvania Railroad Company, who had undertaken to take it through from Jersey City to Pittsburgh, a distance of 439½ miles, *without a stop*, a task which was successfully accomplished in 10 hours 5 min., or at an average speed of 43.46 miles per hour, the train which had left Jersey City 3 min. late arriving at Pittsburgh 2 min. before time. The locomotive (No. 573) employed to make this run—a run which is by far the most extraordinary on record—was of the standard type denominated by the Pennsylvania Railroad Company their “C class”, a class of which we gave particulars and illustrations on pages 155, 156, and 157 of our nineteenth volume. The engine has 17 in. cylinders, 24 in. stroke, and two pairs of coupled wheels 5 ft. in diameter, there being a four-wheeled truck at the leading end. The boiler has a total heating surface of 1096 square feet, namely, 984 square feet of external tube surface and 112 square feet of firebox surface, while the fire-grate area is 17.6 square feet. The weight of the engine is 74,300 lb. The tender is fitted with Mr. Ramsbottom’s arrangement for taking up water on the road—or as our Transatlantic friends call it, a “jerk-water”—so that no stops had to be made for water, while in addition to the coal on the tender an extra supply was carried in bags in the baggage car. The coal used was bituminous. The speed during the run we understand never fell below 25 miles per hour, this low speed being that at which the train crossed the bridge at Harrisburg, while it was in many parts over 60 miles per hour; thus from Princeton Junction to Trenton a distance of 9.6 miles, was run in 9 minutes, or at the rate of 64 miles per hour. The engine was run throughout by William Phillips the engineman to whom it belonged, but an engineman from each division of the line was also on the train, each piloting it over the section to which he belonged. Locomotive engineers—and probably they only—will fully appreciate this remarkable performance.—(*Engineering*, London, June 30, 1876, Vol. 21, p. 560). Contributed by H. G. Boutell.

Worth Reading

(Compiled by ELIZABETH O. CULLEN, *Reference Librarian*
Bureau of Railway Economics, Washington, D. C.)

— BOOKS AND PAMPHLETS —

Association of American Railroads—Plan of Organization. 17 p. Washington, D. C., Association of American Railroads. *Apply.*

Beyond the Desert, by Eugene Manlove Rhodes. 237 p. Boston, Houghton, Mifflin Co. \$2. In 1893, "La Huerta [N. M.] hungered and thirsted for a railroad . . ." This novel recounts the problems of finding routes where there would be water for locomotives and other complications.

The End of an Era, by L. K. Sillico. 76, 12 p. illus. New York City, The Author. *Apply.* Address to Franklin Institute, Philadelphia, Dec. 20, 1934, outlining transportation development in this country from the Cumberland Road wagons through railroads to seatrains and airplanes.

Facts About British Railways 1935. 32 p. fold. map. London, Eng., British Railways Press Office. *Apply* to Associated British Railways, New York City.

Memphis—Its Economic Position, by Ralph C. Hon. 27 mimeo. p. Memphis, Tenn., Memphis Chamber of Commerce. *Apply.* "Transportation" p. 1-8 succinctly reviews transportation developments at Memphis from colonial times to the present.

Railway and Highway Transportation Abroad—A Study of Existing Relationships, by W. Rodney Long. 426 p. Washington, D. C., U. S. Government Printing Office. 50 cents. Issued as Trade Promotion Series No. 155, Department of Commerce.

A Review of Railway Operations in 1934, by Dr. Julius H. Parmelee. 28 p. Washington, D. C., Bureau of Railway Economics of Association of American Railroads. *Apply.* Reprinted by permission from *Railway Age*, Jan. 26, 1935, and figures revised to March 1, 1935. Special Series Bulletin No. 63.

Road and Rail in Forty Countries. Report to International Chamber of Commerce by Dr. Paul Wohl and Professor A. Albitreccia. 453 p. Oxford, Eng., Oxford Press. \$6.

— PERIODICAL ARTICLES —

"*Design for Living*," by D. Crombie. ". . . my reflection of Seventy Years of Canadian Life . . . With apologies to Noel Coward, I will call my remarks 'Design for Living' . . ." p. 24. Canadian Railway Club Proceedings, February 1935, p. 24-34.

Know Your Railroad, by Paul M. Smith. Two-page, succinct sketches of individual railroads in the United States and Canada, that began in *Locomotive Engineers Journal*, February 1934, and have appeared in each monthly issue since. Illustrated.

Lower Zambesi Bridge Section. An illustrated detailed account of the construction of "the longest railway bridge in the world". *Modern Transport*, March 9, 1935.

Modern Trends in Freight and Passenger Cars: A Symposium. Papers by C. B. Peck, V. R. Willoughby, M. C. Blest, L. A. Belding, and Ken Cartwright. New York Railroad Club. Official Proceedings, February 1935, p. 81-100.

The New Train "Asia" Goes Into Service. Stream-Lined Super Express of the South Manchuria Railway Company Does 140 km. per Hour. *Far Eastern Review*, February, 1935, p. 51-56, 61.

Serving Fruit and Vegetable Shippers by Express, by C. R. Graham. Reviews present-day services and gives years and sections of the country in which specified fruits and vegetables began to be produced and transported on commercial scales. *Market Growers' Journal*, March 1, 1935, p. 120-122.

Thomas Hart Benton On His Way Back to Missouri, by Ruth Pickering. The Thomas Hart Benton of the present day is an artist whose painting of railroads and trains has become notable. This article is illustrated by some of the paintings. *Arts and Decoration*, February 1935, p. 15-20.

A World's Record on the L. N. E. R. "A maximum speed of 108 m.p.h. attained, and 536½ miles run by one locomotive . . . on a test journey [March 5, 1935] from London to Newcastle and back . . ." *Railway Gazette*, March 8, 1935, p. 466-467. The locomotive, *Papyrus*, was described in some detail in *Railway Gazette*, March 15, 1935, p. 509.

Herbert Fisher

Herbert Fisher, Life Member and Vice President of this Society, 1921-1925, passed away on April 15th, 1935. Born in Dedham, the shire town of Norfolk County, Massachusetts, March 8th, 1854, his boyish interest made him an observer of the locomotives of the old Boston & Providence and Boston & New York Central roads.

Upon the completion of his education in the Dedham schools, he went to Manchester, N. H. where he served his apprenticeship in the old Manchester Mills. After serving his time he was identified with the cotton manufacturing industry at Coaticook, P. Q., Anniston, Ala. and North Adams, Mass.

He came to Taunton, Mass., with William Mason, builder of cotton machinery and locomotives, when Mr. Mason was in the height of his building career. No one could long serve under Mr. Mason, in any capacity, without respecting his ability or absorbing some of his spontaneity. It was Father's good fortune to see this firm prosper under the guidance of Mr. Mason and his capable Superintendent—Saul Eddy. It was his misfortune to see it slowly decay and finally go to pieces after the death of William Mason. Empty walls stand now where over 1000 busy workmen were at one time employed. Ten years after the death of William Mason, 1893, he became identified with other cotton industries and shortly before the late war he retired from business activity altogether.

To many of our members he has been an authority on the Mason locomotive and altho' he was not blind to the merits of the other locomotive builders, his loyalty to his old employer and his faith in his ability gave him unbounded admiration for William Mason.

As early as 1895 he began assembling a collection of locomotive photographs embracing engines on which he had worked. Gradually his interests broadened to include engines which he remembered as a boy or he had seen in the different parts of the country, either in connection with his work or in his travels. His knowledge of the Mason engine, coupled with the fact that he was allowed to consult their records gave him every opportunity to become an authority on that subject. Moreover, his generosity, either through the gift of prints or information was the means of preserving this material for the other collectors. The fine, clear, bold handwriting, with which many of you are familiar, in the last year or two gave way to an unsteady scrawl on account of the palsy and it became increasingly difficult to write letters.

He was interested in his home and in his church. He was fond of music, especially that of the organ and for many years was chairman of the organ committee in his church. He was fond of the outdoors and many a time of an early evening or a Sunday afternoon, he, in the company with his boy and the latter's bird dog, would roam the woods and fields together. Here it was that sometimes the outdoors would be discussed, the dog saw to that, but more often the conversation would turn to locomotives and railroads and the boy was always an attentive listener.

When this Society was formed he worked ardently for its success during those trying and formative years. His enthusiasm never lessened towards the Society and before his death he gave us all of his larger framed pictures in order that he might see how they would adorn the walls of our rooms in the Baker Library. The Society has lost a valued member and your Editor has lost his "Dad".

The "West Point" of the South Carolina R. R.

MANY of our members doubtless have copies of—"Centennial History of the South Carolina R. R." by S. M. Derrick and "History of the First Locomotives of America" by William H. Brown.

Mr. Brown, in his work, states that the "West Point" underwent a trial of speed on March 5th, 1831, and quotes the *Charleston Courier*, dated August 1st of that year for his authority. The newspaper account makes reference to the use of the barrier car caused by the explosion of the "Best Friend" for the protection of the passengers.

Mr. Brown previously gives an account of the explosion of the "Best Friend", fixing the date as Friday, June 17th, 1831. The question naturally arises, how could the "West Point", with a barrier car have been tried on March 5th of that year.

This thought evidently occurred to one of our members, Mr. Guy E. Mauldin, who located a copy of the *Charleston Courier*, dated August 1, 1831. The account is as follows:

"On Saturday afternoon, the Locomotive Engine 'West Point', underwent a trial of speed, with the barrier car and four cars for passengers, on the Rail Road.

"There were 117 passengers, of which number 50 were Ladies, in the four cars, and 9 persons on the engine, with 6 bales cotton on the barrier car, and the trip to the Four Mile House, $2\frac{3}{4}$ miles from the starting point, was completed in 11 minutes, when the cars were stopped 2 minutes to oil the axles—and the $2\frac{3}{4}$ miles to the Fork of Dorchester Road was completed in 8 minutes.

"The safety which has been insured by the introduction of the barrier car, and the improvements in the formation of the flanch (flange) of the wheels, which, we learn, was made by one of the young mechanics of this city, (Mr. J. D. Petsch) steam engineer in the Company's service, will no doubt elicit a portion of patronage. In the ensuing week we hope to be able to announce to the Stockholders the opening of 11 miles in continuation from the City. The new Steam Car works admirably, and the safety valve being out of reach of any person on the engine, will doubtless contribute to the prevention of accidents in the future.

"The work is in active progress along the line of Road, and we learn that many of the Contractors between Cypress and Edisto have already completed considerable portions of their work. That nearest town is, and will be in continued progress, notwithstanding the warmth of the weather."

This account is quite a bit at variance from the account quoted by William H. Brown. Furthermore, the matter in question, the date given by William H. Brown, March 5, 1831, is not mentioned in the account of the *Charleston Courier*, on August 1st, 1831.

It so happens that August 1st, 1831 was a Monday, and the "previous Saturday" would make the date of the trial on July 30th, which according to the *Courier* is the true date.

The student of railroad history has always recognized William H. Brown as an authority and he will always be regarded as such. Professor Derrick and others have quoted liberally from this work and they well may continue to do so. Mr. Brown was certainly in error when he inserted the date in his quotation because it does not exist in the original report and we feel indebted to Mr. Mauldin for calling this matter to our attention.